

FIG. 1

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

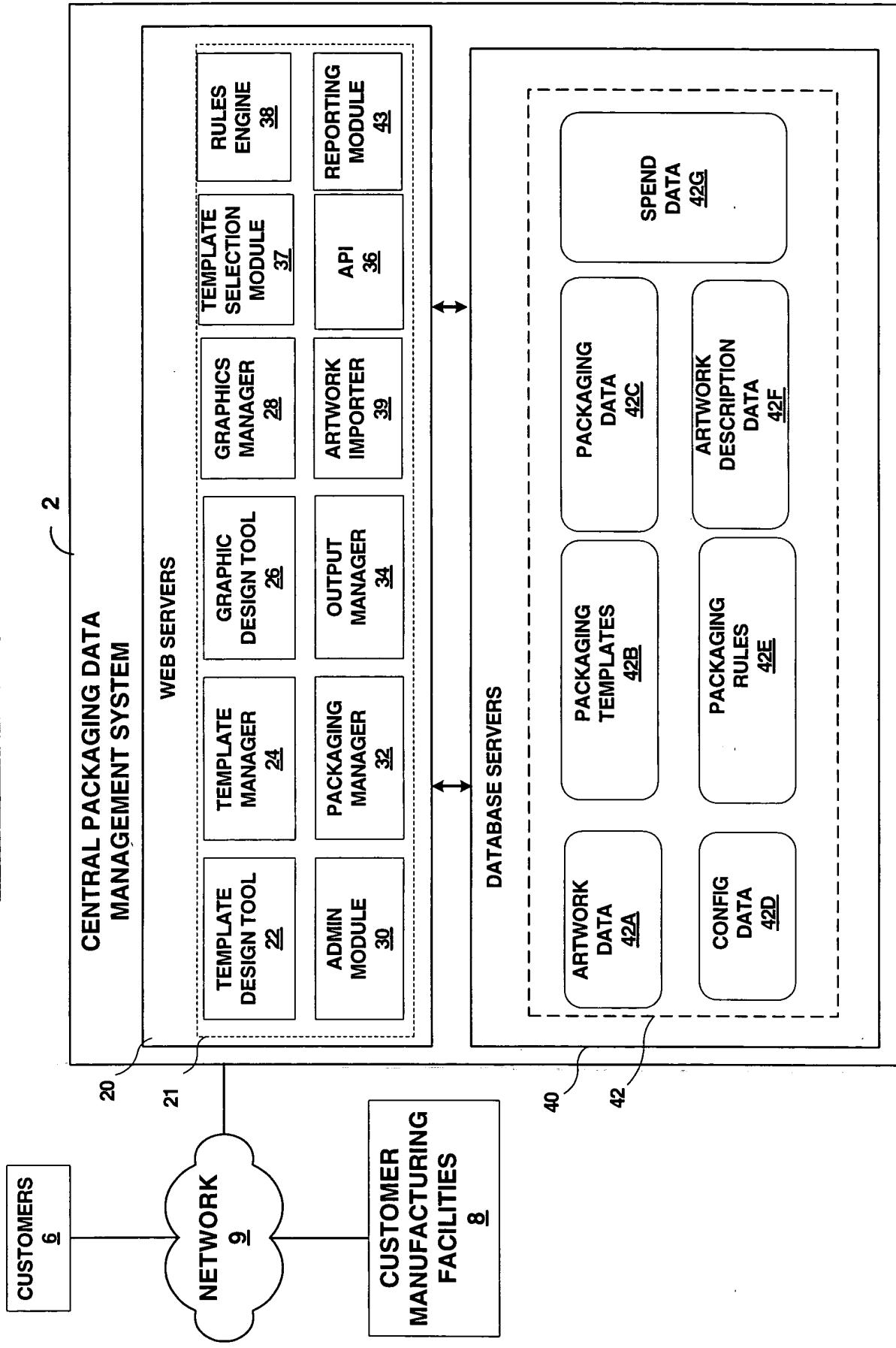


FIG. 2

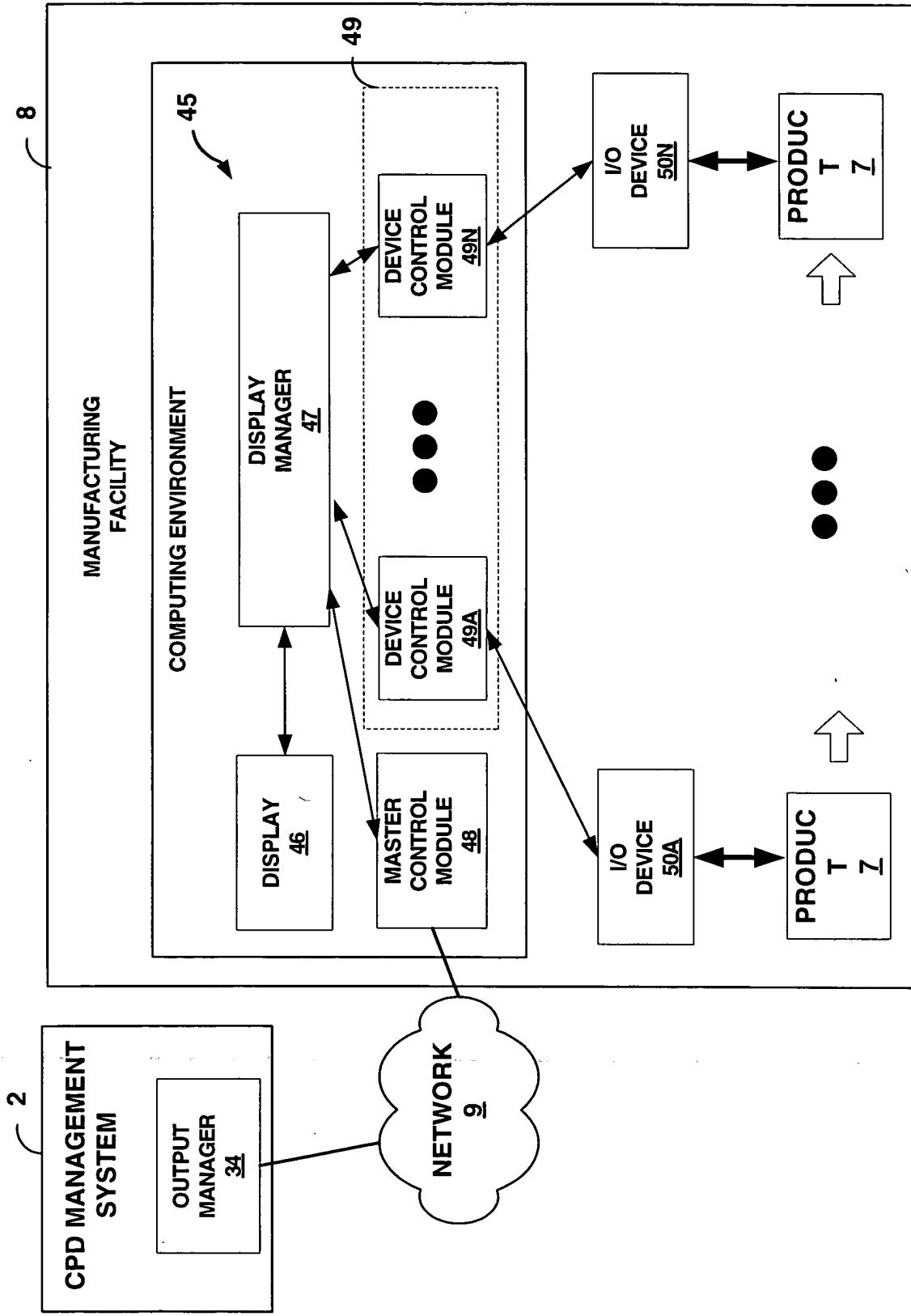


FIG. 3

52

MANUFACTURING
FACILITY

COMPUTING ENVIRONMENT

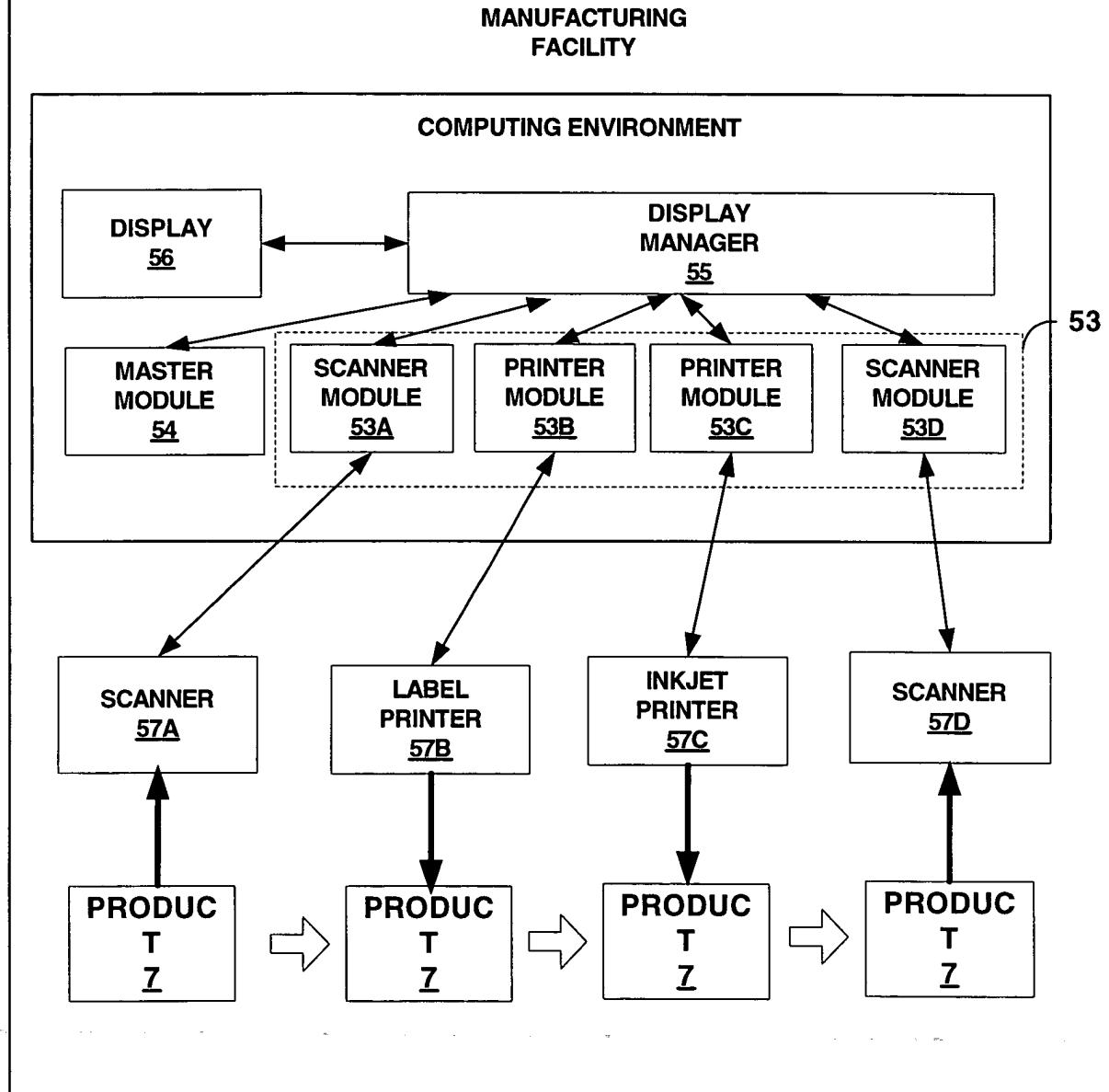


FIG. 4

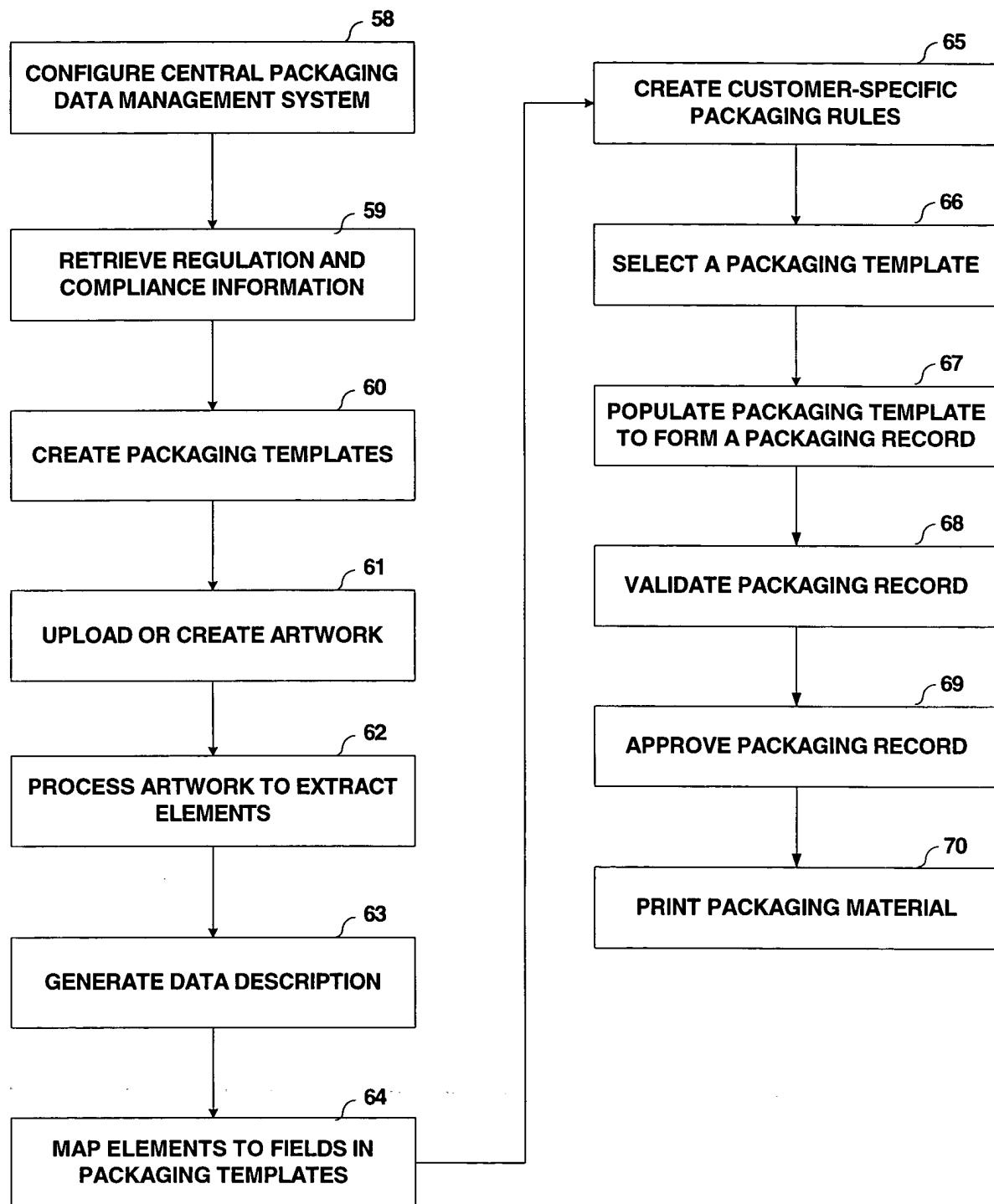


FIG. 5

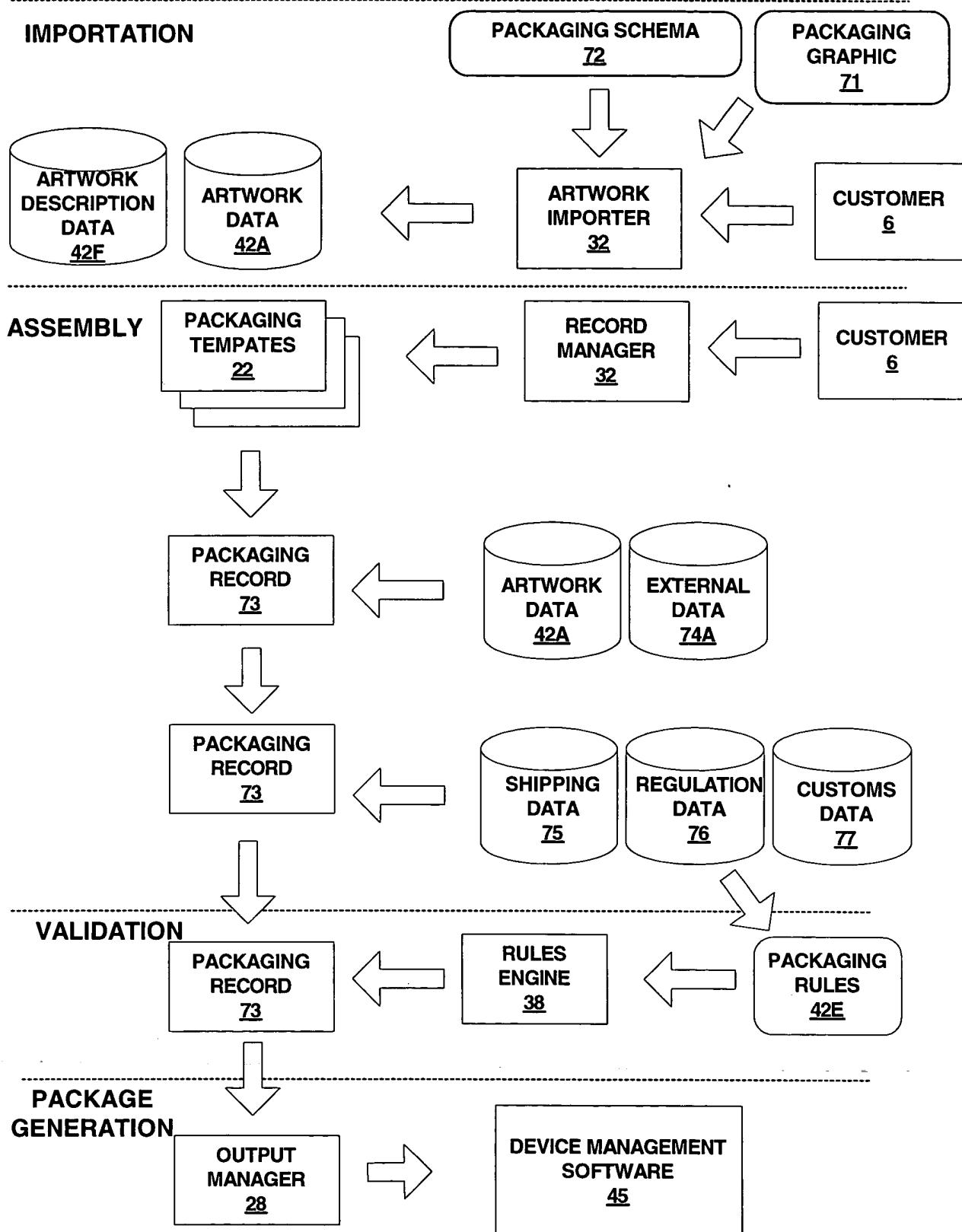


FIG. 6

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

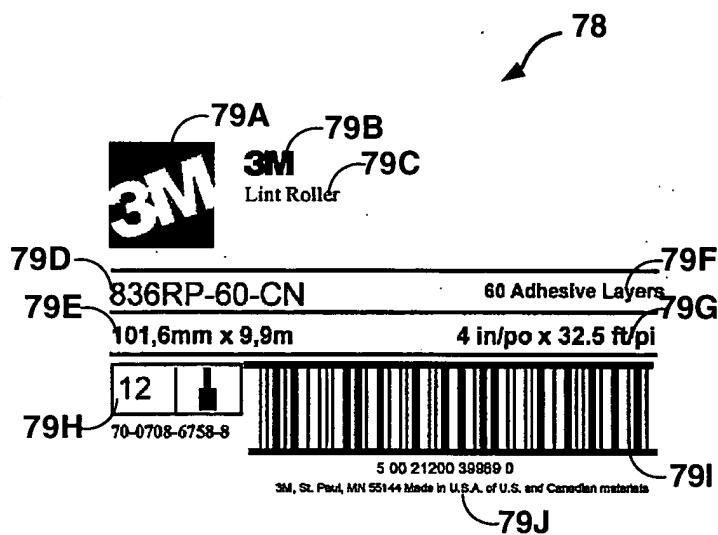


FIG. 7

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

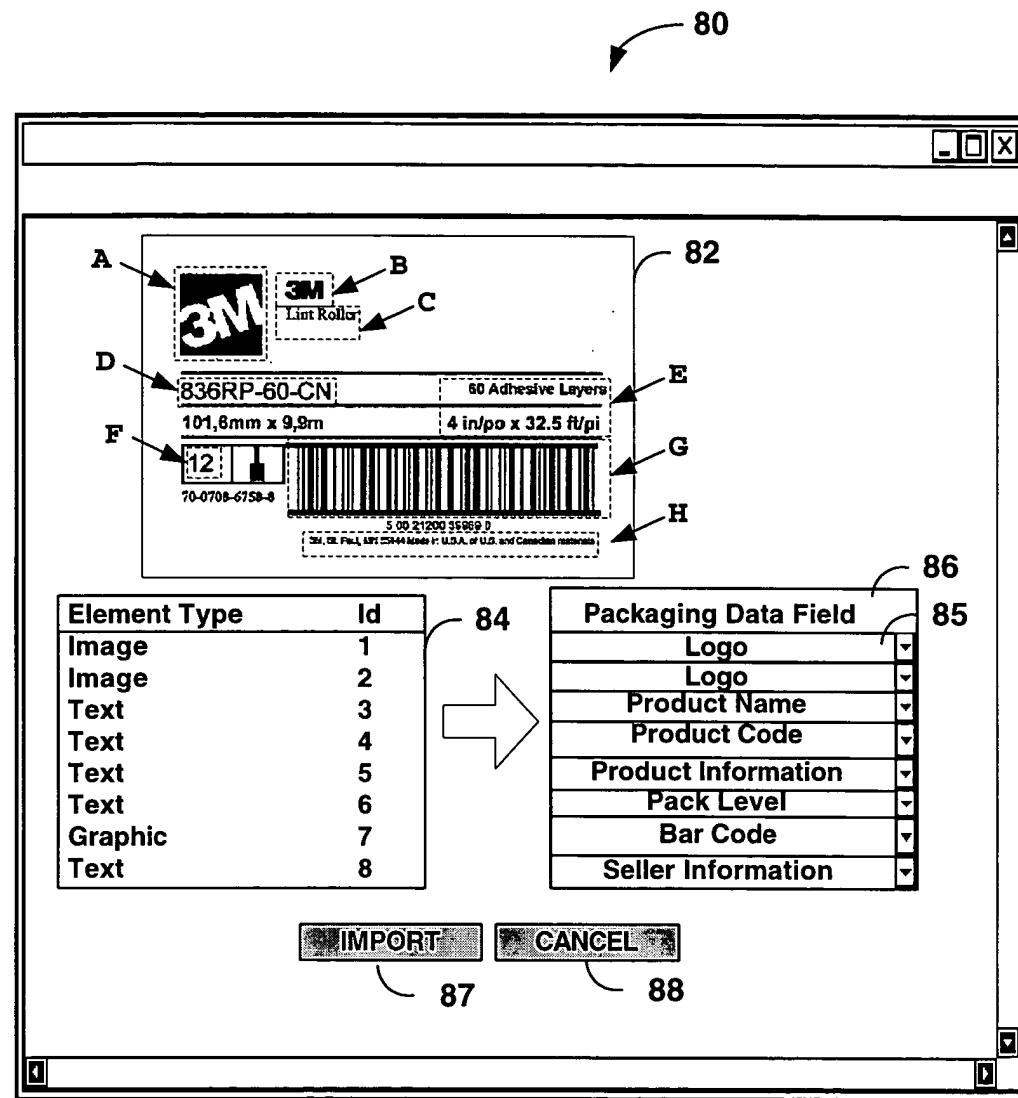


FIG. 8

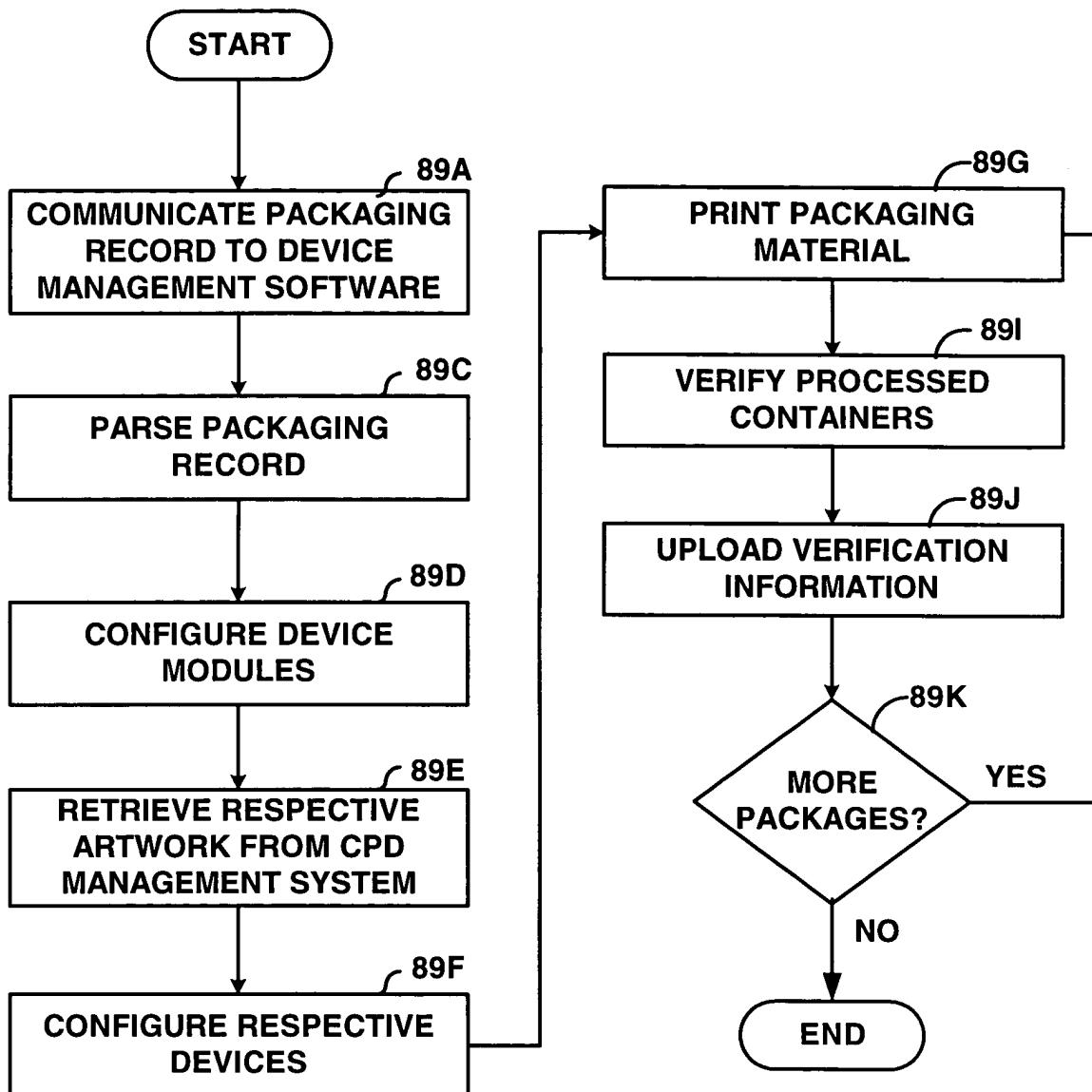


FIG. 9

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

TEMPLATE MANAGER

3M Package Engineering
Central Labeling Database

Central Labeling Database Template Management

90 →

TEMPLATE MANAGEMENT

91A [Central Labeling Database Template Management] **91B** [Add] **91C** [Template ID: 12345678] **91D** [Name: Label Name] **91E** [Status: Draft] **91F** [Business Units: Data Storage Division] **91G** [Supersedes: Old Label] **91H** [Market: Electronics] **91I** [Pack Level: 1, 2, 3, 4, 5, 6, 7, 8, 9] **91J** [Suggested Print Material: Polyester] **91K** [Date of Entry] **91L** [Date of Approval] **91M** [Description] **91N** [Search] **91O** [Global] **91P** [Pack Level] **91Q** [Market] **91R** [Business Units] **91S** [Search Results] **91T** [Enter Template ID: - - -] **91U** [Search] **91V** [Display]

91W [Browse] **91X** [Label.lbl]

FIG. 10

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

GRAPHICS MANAGER

3M Package Engineering Central Labeling Database

Central Labeling Database: Graphics Management

CLD Graphics Management System

Control Panel

94 Add

99 Approve

Change

95 Search

Enter a graphic name:

96 Description

1234 Flying Wings Corporate Logo

Unique Graphic ID

97 Name

Corporate Logo

98 Categories

○ Pack Level

○ Logo

○ Symbol

Graphic Data

100 Status

Date of Entry

Date Approved

Trustee

Superseded by

Source Path And Filename

J:\Logos\flywingwings.jpg

Browse

Results

Name

Id Number

Status

View

93

FIG. 11

PACKAGING
MANAGER
101

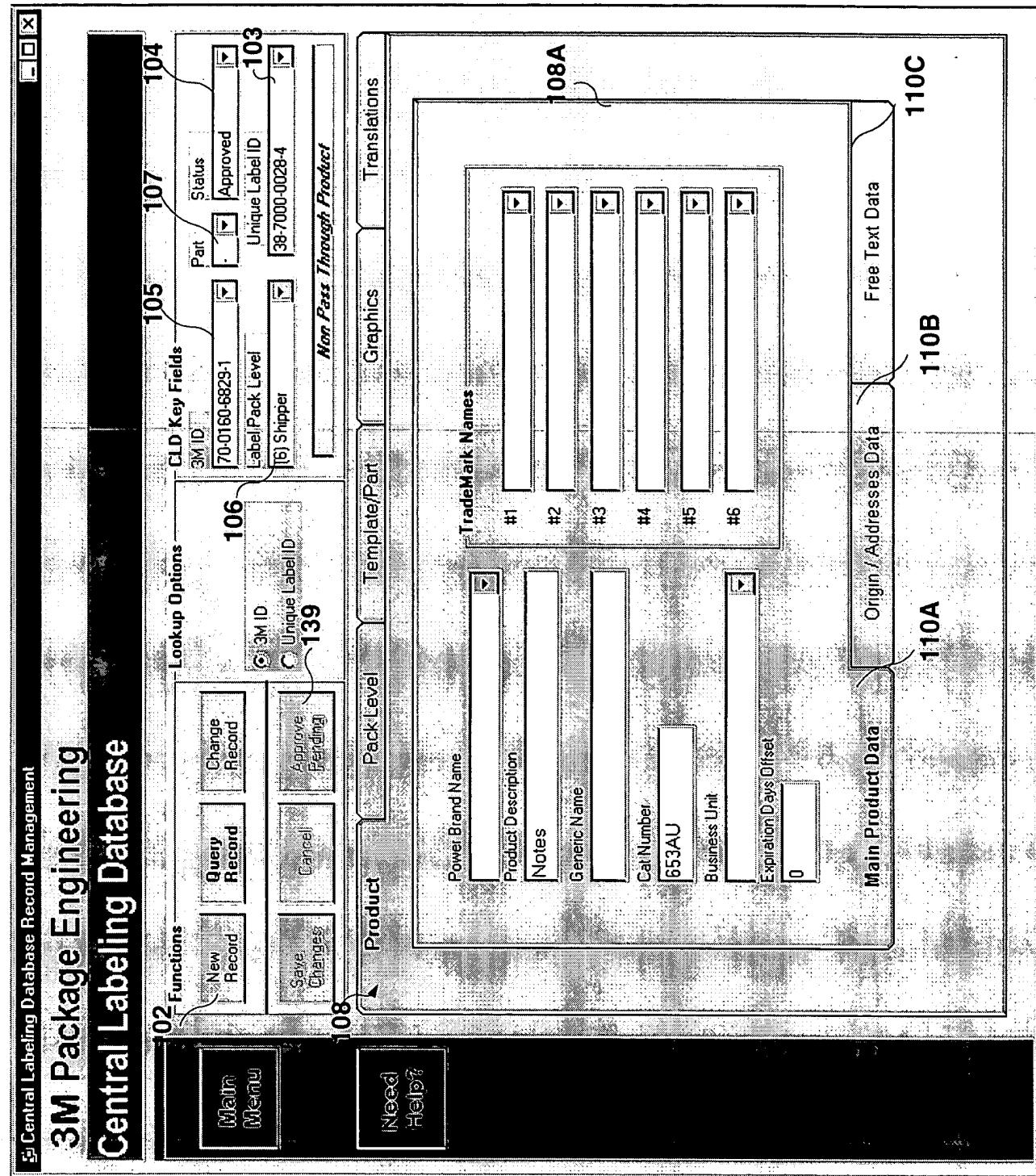


FIG. 12

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING
MANAGER

3M Package Engineering Central Labeling Database

101

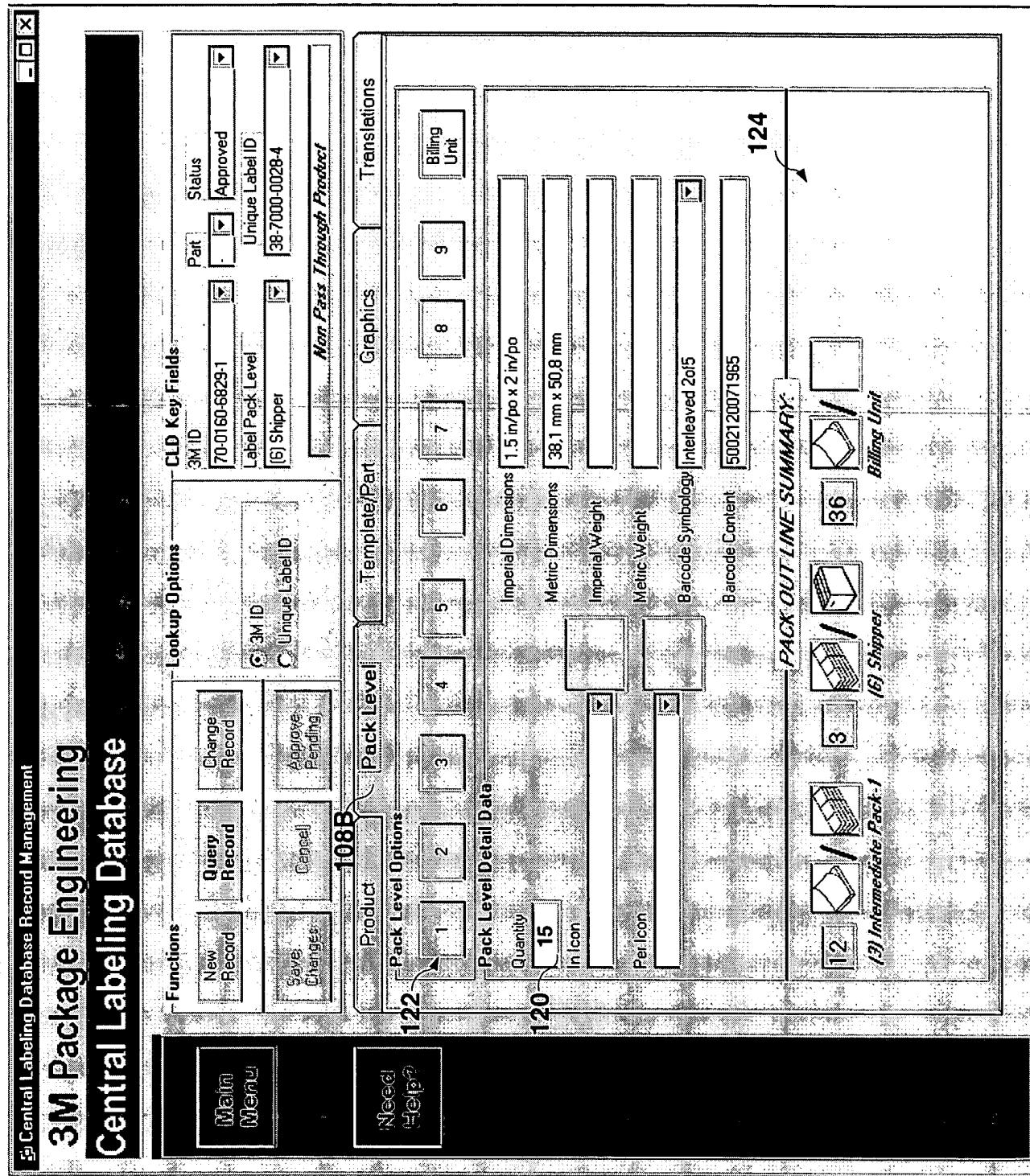
112

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110B

FIG. 13



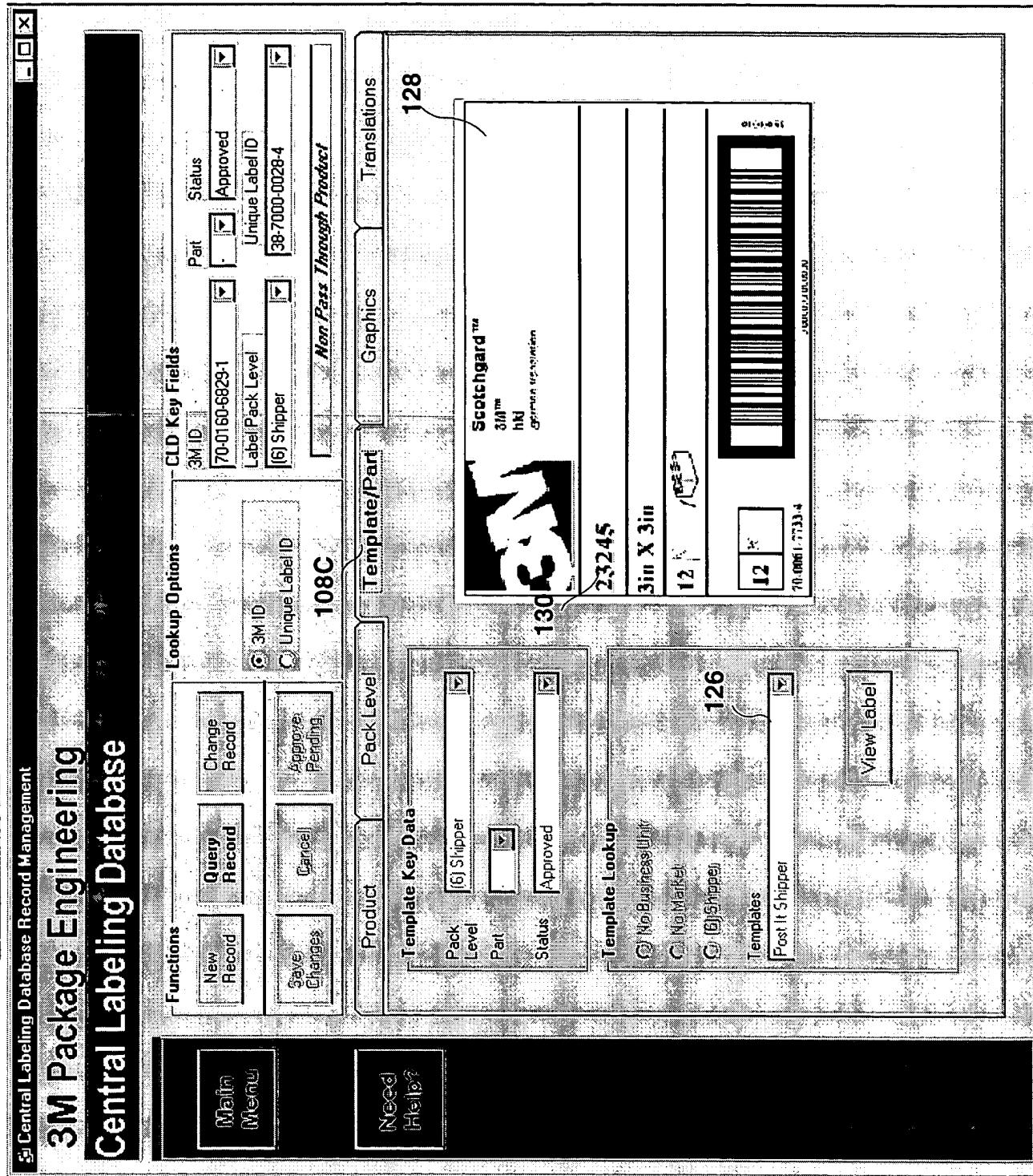
First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL PROCUREMENT USING CENTRALIZED PACKAGING DATA MANAGEMENT SYSTEM

PACKAGING MANAGER

3M Package Engineering Central Labeling Database



101

FIG. 15

First Named Inventor: Mary K. Kroening
 Case No.: 59052US002
 Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
 PROCUREMENT USING CENTRALIZED PACKAGING DATA
 MANAGEMENT SYSTEM

PACKAGING MANAGER

101

3M Package Engineering

Central Labelling Database

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FIG. 16

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

PACKAGING MANAGER

Central Labeling Database Record Management

3M Package Engineering Central Labeling Database

CLD Key Fields

3M ID	70-0160-6829-1	Status	Approved
Label Pack Level	1	Unique Label ID	38-7000-0028-4
(6) Shipper			
Non Pass Through Product 108E			

Functions

New Record	Query Record	Change Record	Approve Pending
Save Changes	Cancel		

Product

Product Description Translations

Pack Level	136	Language	Translation Text
(6) Shipper	French	French	Feuilles
Pack Level	Latin AmeriC...	Latin AmeriC...	Notas
Part			
Add			
Change			
Delete			

Translations

Product Description

Notes

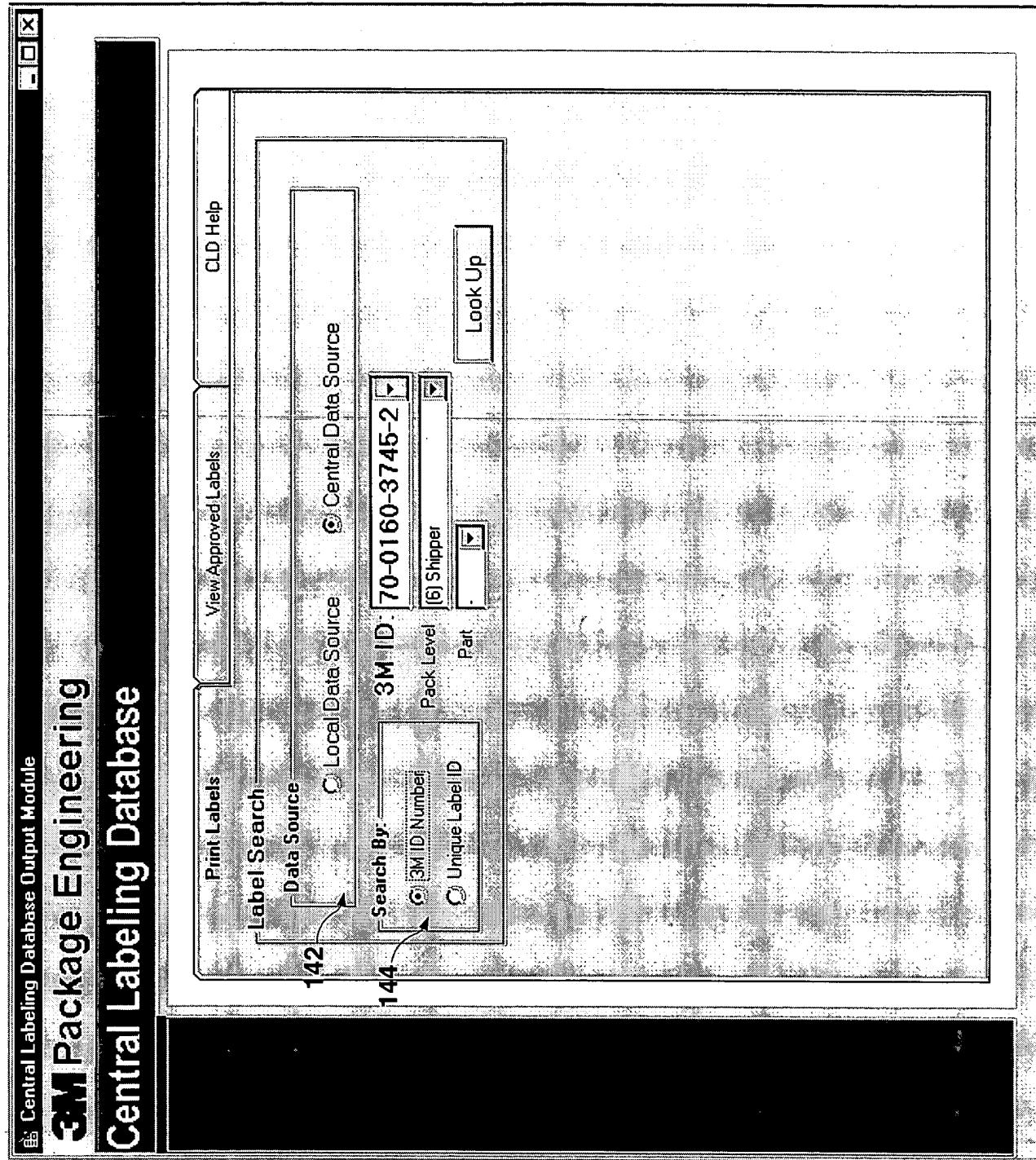
101

FIG. 17

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM



OUTPUT
MANAGER

140

FIG. 18

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

OUTPUT
MANAGER

140

Central Labeling Database Output Module

3M Package Engineering

Central Labeling Database

146

Label Search

Print Labels

View Approved Labels

CLD Help

148

Variable Run-Time Data

150

152

146

Label Detail Data

146

Product Description

Notes

3M ID Number

Unique Label ID

Search By

Local Data Source

Central Data Source

3M ID: 70-0160-4442-5

Pack Level

Part

Shipper

Look Up

Catalog Number

Barcode Content

653RP

500212000339

Metric Dimensions

Imperial Dimensions

1.5 in/pox 2 in/po

38.1 mm x 50.8 mm

Metric Weight

Imperial Weight

Template Name

Post It Shipper

Suggested Label Stock

Calculated Expiration Date

No Offset Specified

148

Batch Code:

Quantity

1

Available Printers

Pkg-HP4050-224-1e

Print

FIG. 19

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

OUTPUT MANAGER

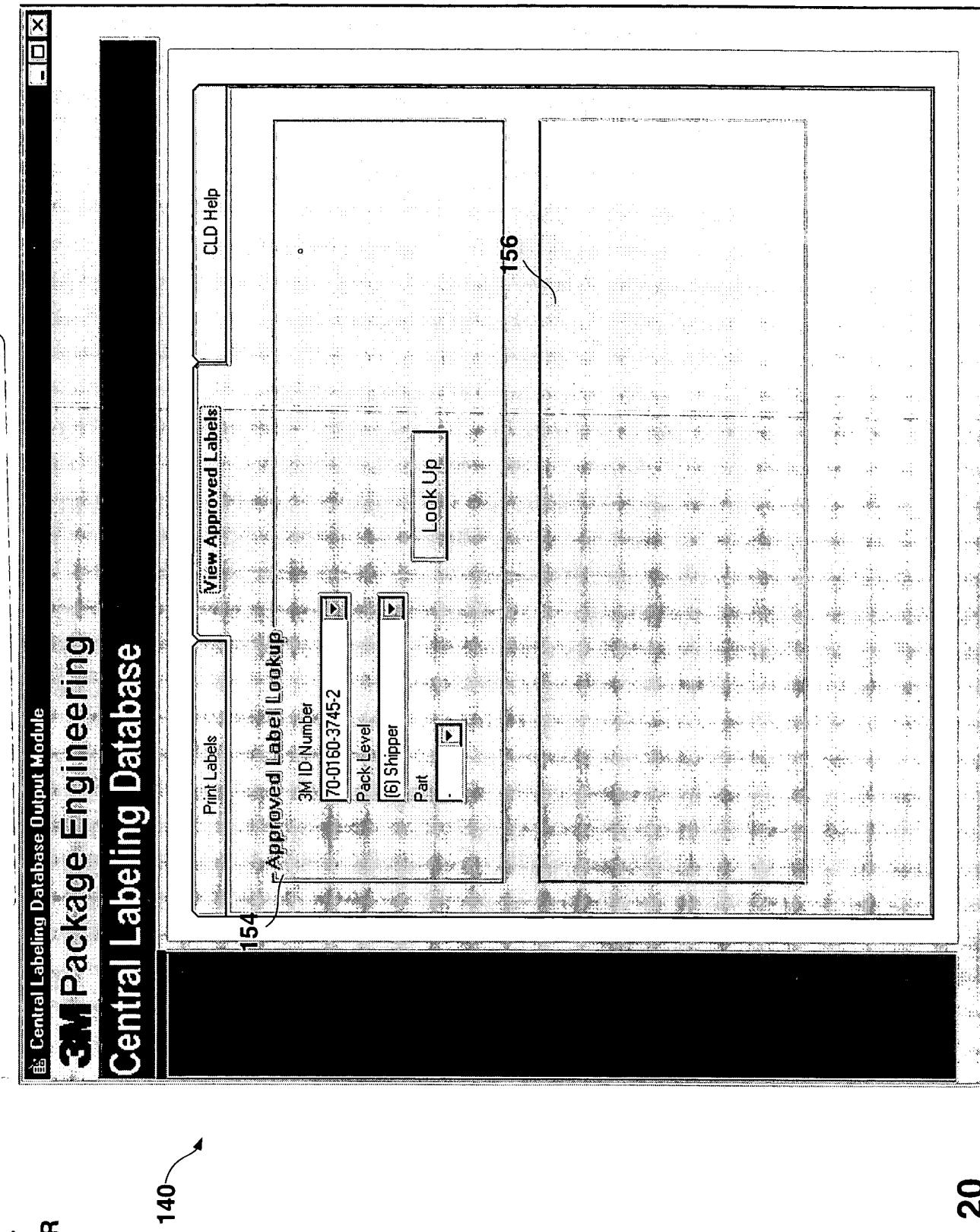


FIG. 20

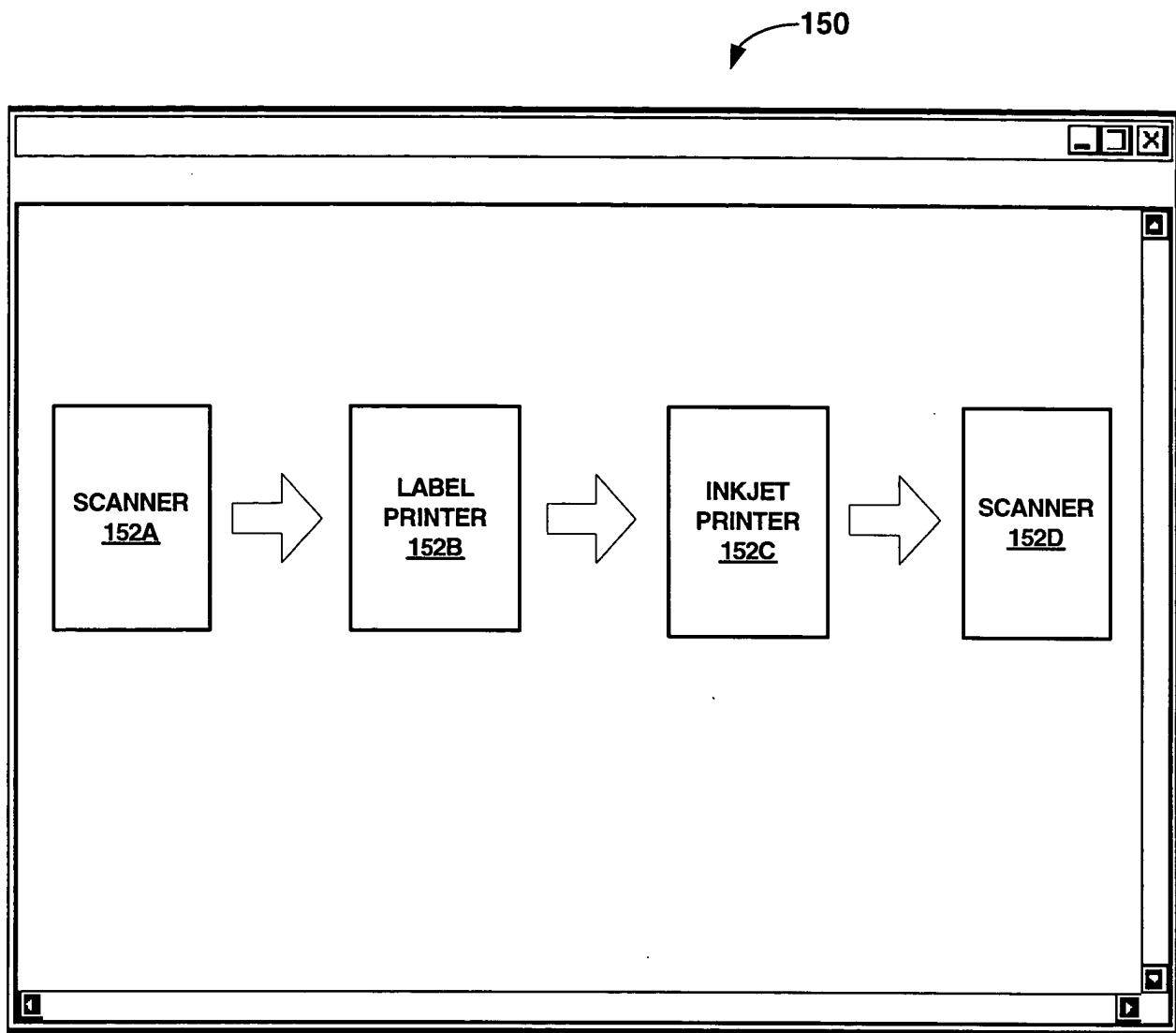


FIG. 21

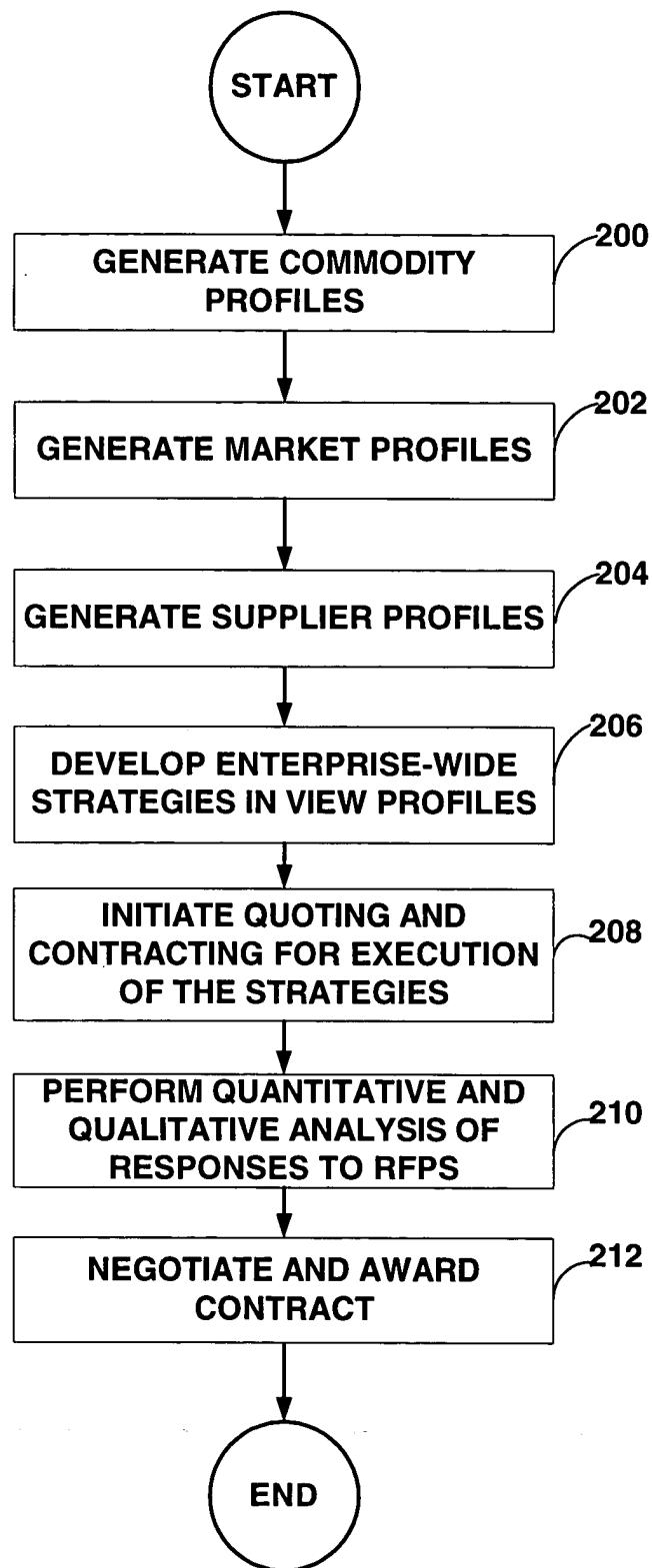


FIG. 22

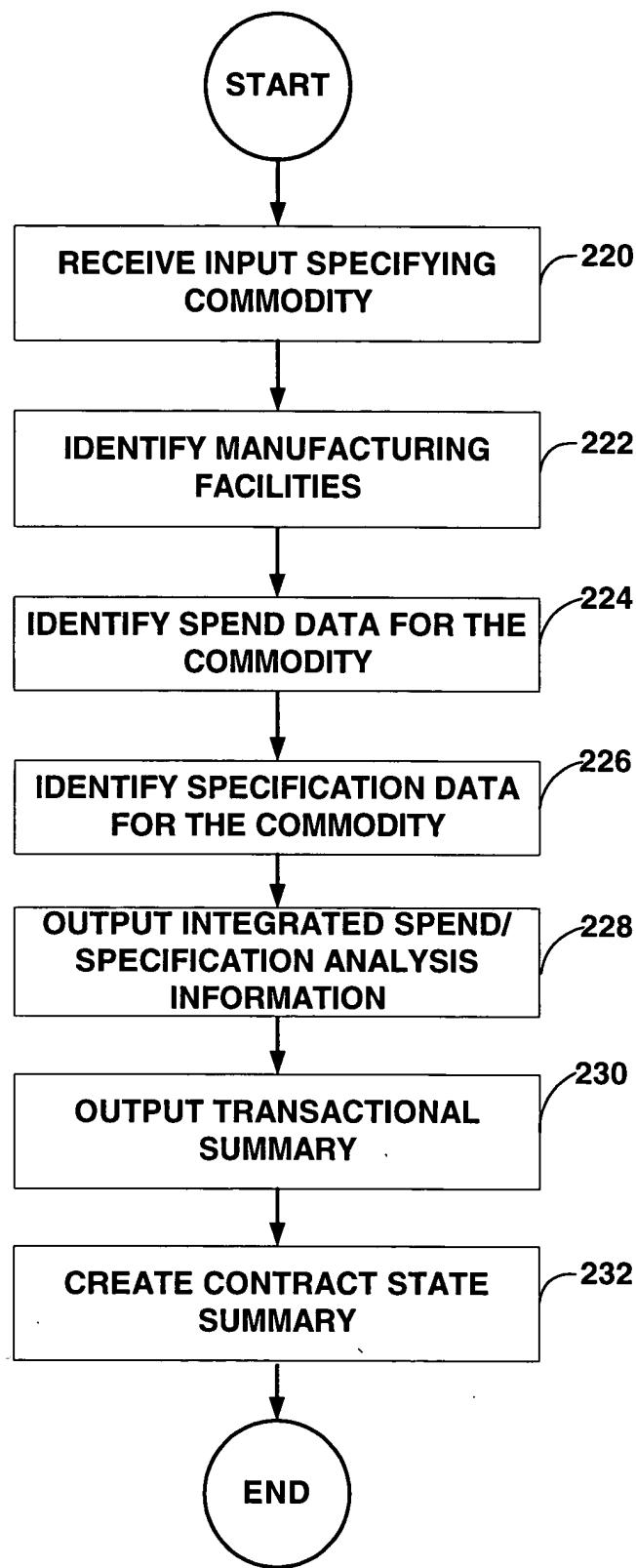


FIG. 23

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

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Specification Data										Purchase Order History Data									
300069	RSC	13.81	5.87	6.81	ECT 26	Kraft	C	1 color	t1234	280,000	0.25	\$70,000	1111	Plant B	Supplier 1				
300070	Die Cut	7	7	8	200#	Bleached White	B	No Print	t1235	320,000	0.80	\$256,000	2222	Plant A	Supplier 2				
300071	FOL	13.4	10	13.75	ECT 32	Kraft	C	2 color	t1236	5000	2.08	\$10,400	3333	Plant A	Supplier 3				
300073	RSC	10	10	10	200#	Kraft	C	1 color	t1237	11,000	0.38	\$4,180	4444	Plant C	Supplier 2				
300074	RSC	10	10	10	ECT 32	Kraft	E	1 color	t1238	160,000	0.26	\$41,600	5555	Plant B	Supplier 3				
300075	RSC	13.81	5.87	6.81	ECT 26	Kraft	E	1 color	t1239	25,000	0.84	\$21,000	6666	Plant B	Supplier 2				
300076	Die Cut	13.4	10	13.75	150#	Mottle White	C	1 color	t1240	500,000	0.15	\$75,000	7777	Plant C	Supplier 3				
300077	RSC	12	12	12	ECT 26	Bleached White	C	1 color	t1241	85,000	0.50	\$42,500	8888	Plant C	Supplier 1				
300078	Die Cut	13.4	10	13.75	ECT 26	Bleached White	E	2 color	t1242	7000	1.65	\$11,550	1234	Plant B	Supplier 1				
300079	RSC	13.81	5.87	6.81	ECT 32	Mottle White	B	No Print	t1243	38,000	0.85	\$32,300	2345	Plant B	Supplier 3				
300080	RSC	23.75	5.5	23.12	150#	Kraft	C	No Print	t1244	3000	0.88	\$2,640	3456	Plant B	Supplier 2				
300081	RSC	13.81	5.87	6.81	150#	Kraft	C	2 color	t1245	5000	1.39	\$6,950	4567	Plant B	Supplier 3				
300082	Die Cut	7	7	8	ECT 26	Mottle White	E	1 color	t1246	135,000	0.28	\$37,800	5678	Plant A	Supplier 1				
300083	RSC	13.81	5.87	6.81	ECT 32	Kraft	B	1 color	t1247	30000	0.55	\$16,500	6789	Plant A	Supplier 2				

FIG. 24

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Material	Sum of Total Invoice \$	Supplier 1	Supplier 2	Supplier 3	Grand Total
Bleached White	\$54,050	\$256,000	\$126,000	\$126,000	\$436,050
Kraft	\$70,000	\$44,320	\$76,450	\$76,450	\$190,770
Mottle White	\$37,800	\$36,000	\$107,300	\$107,300	\$181,100
Grand Total	\$161,850	\$336,320	\$309,750	\$309,750	\$807,920

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Material	Sum of Total Invoice \$	Site Location	Plant A	Plant B	Plant C	Grand Total
Bleached White	\$256,000		\$11,550	\$168,500	\$168,500	\$436,050
Kraft	\$44,400		\$142,190	\$4,180	\$4,180	\$190,770
Mottle White	\$37,800		\$32,300	\$111,000	\$111,000	\$181,100
Grand Total	\$338,200		\$186,040	\$283,680	\$283,680	\$807,920

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MANAGEMENT SYSTEM

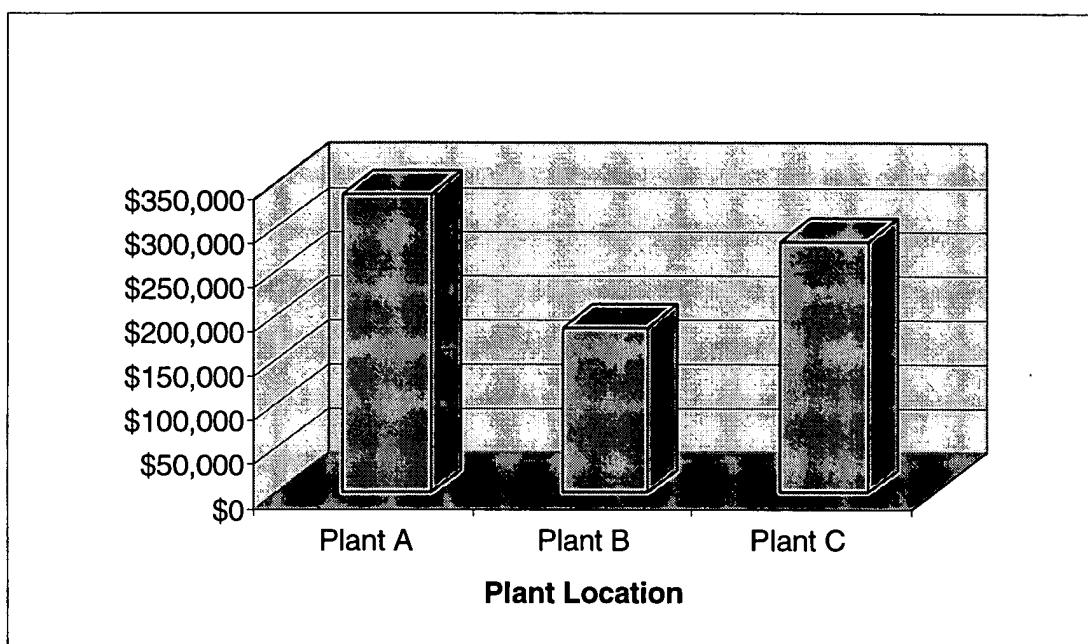


FIG. 26

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

252

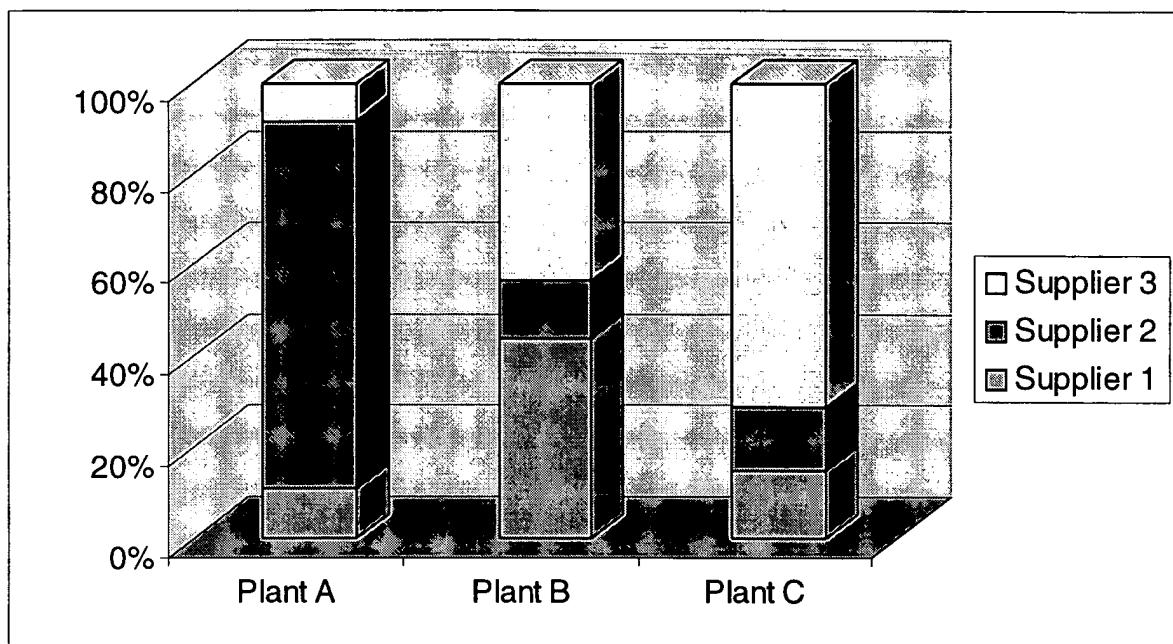


FIG. 27

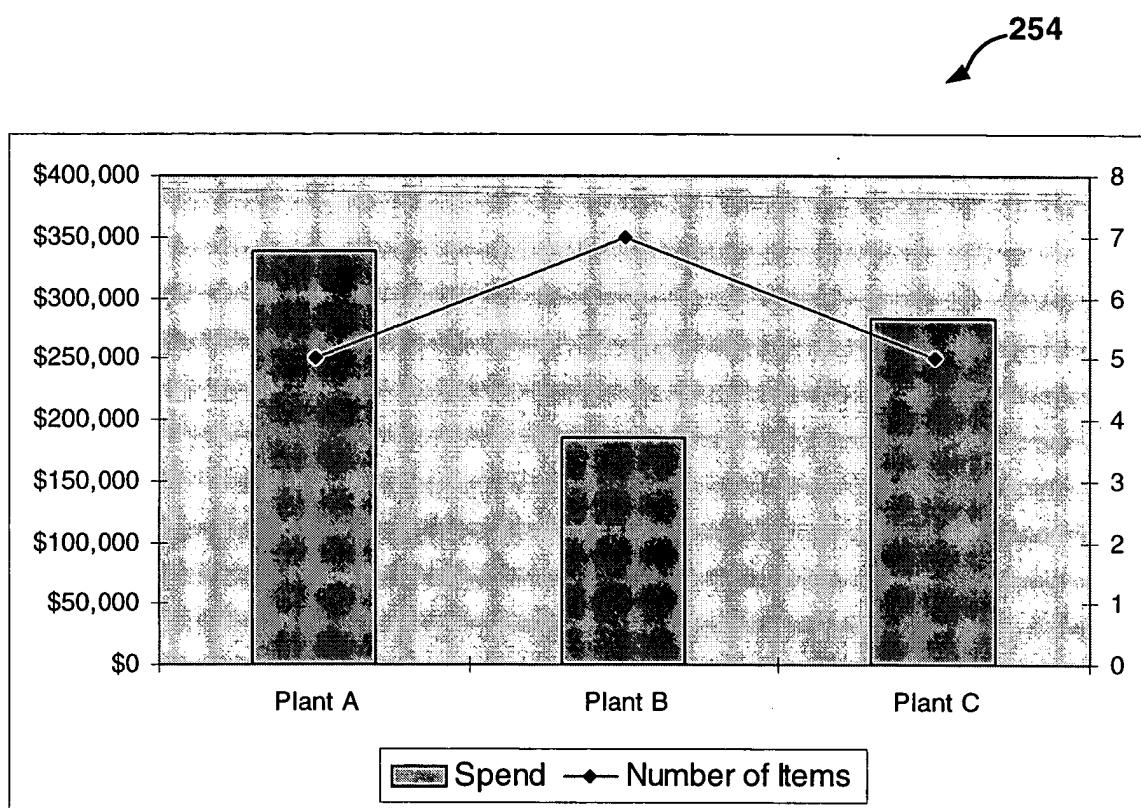


FIG. 28

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

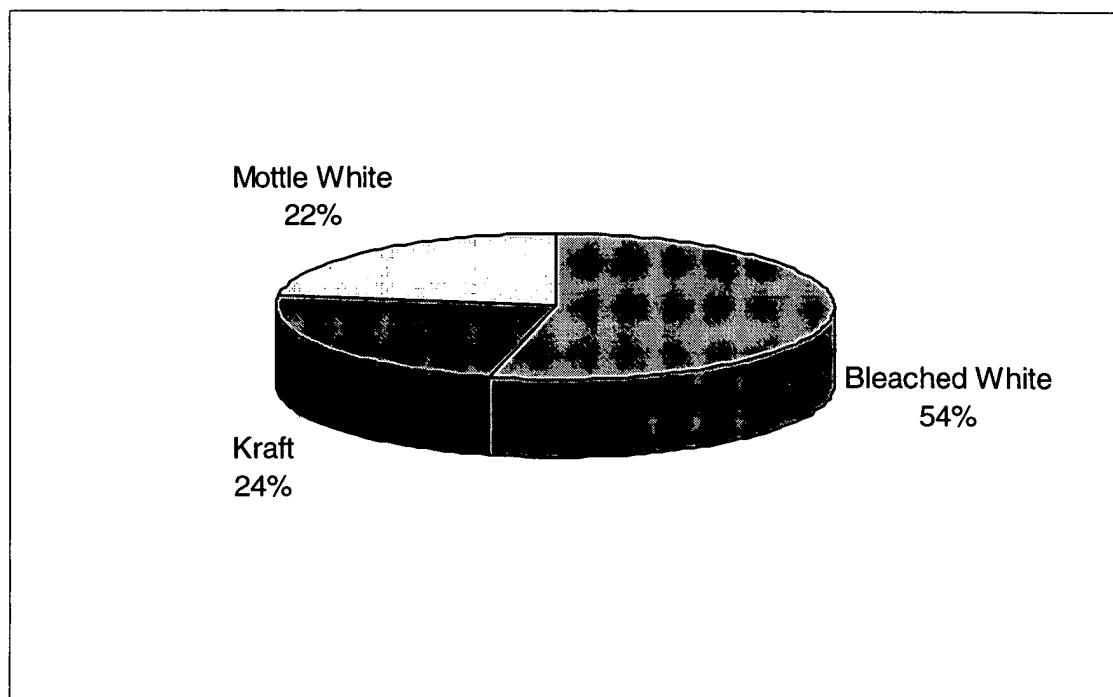


FIG. 29

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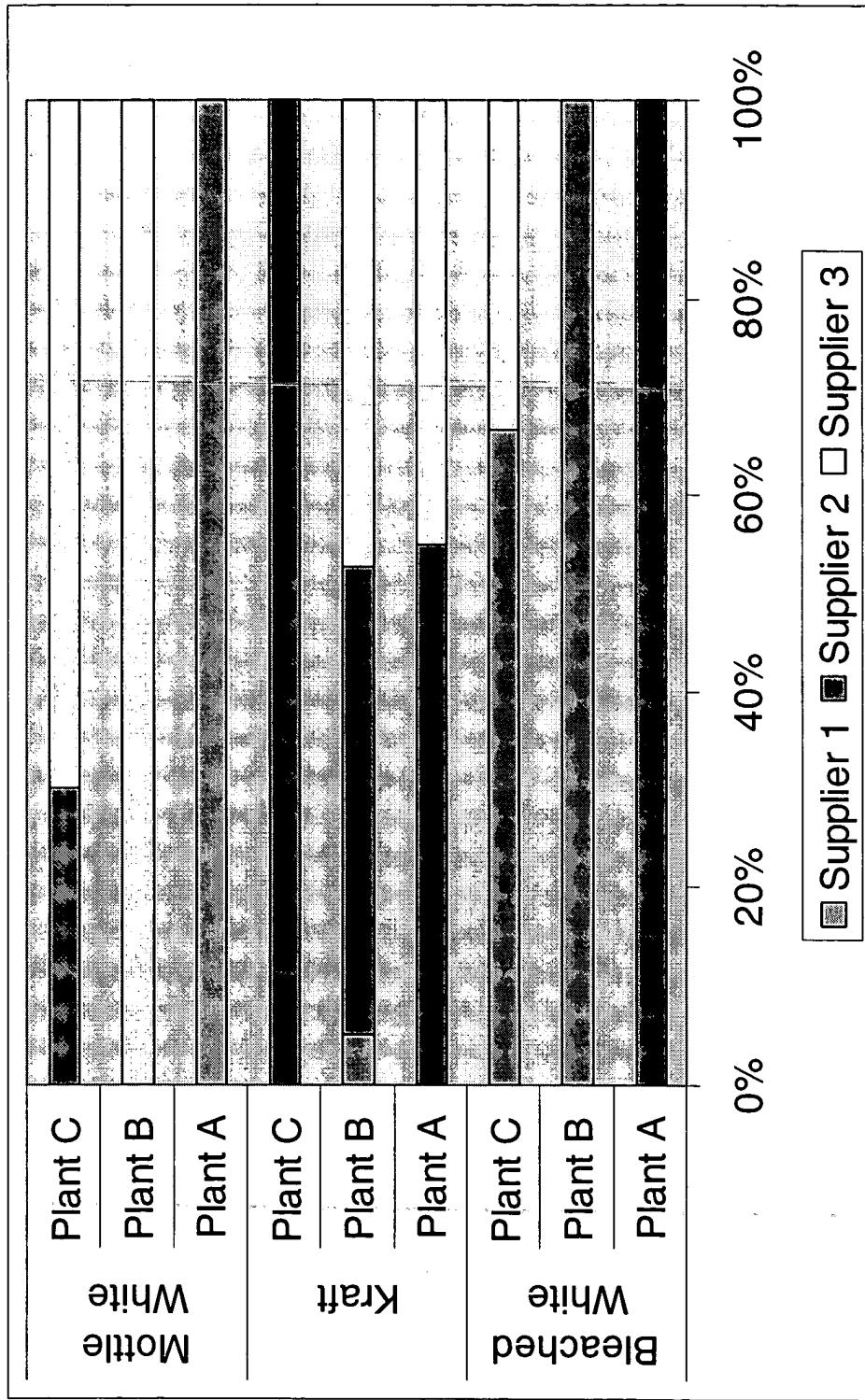


FIG. 30

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

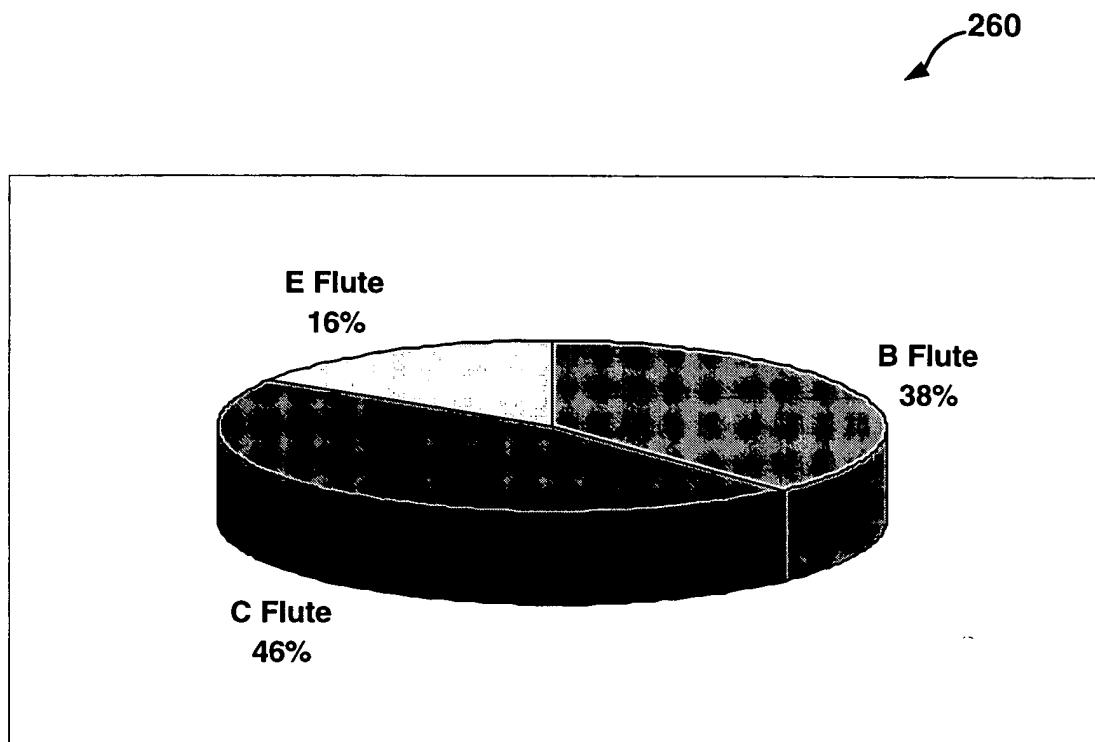


FIG. 31

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

262

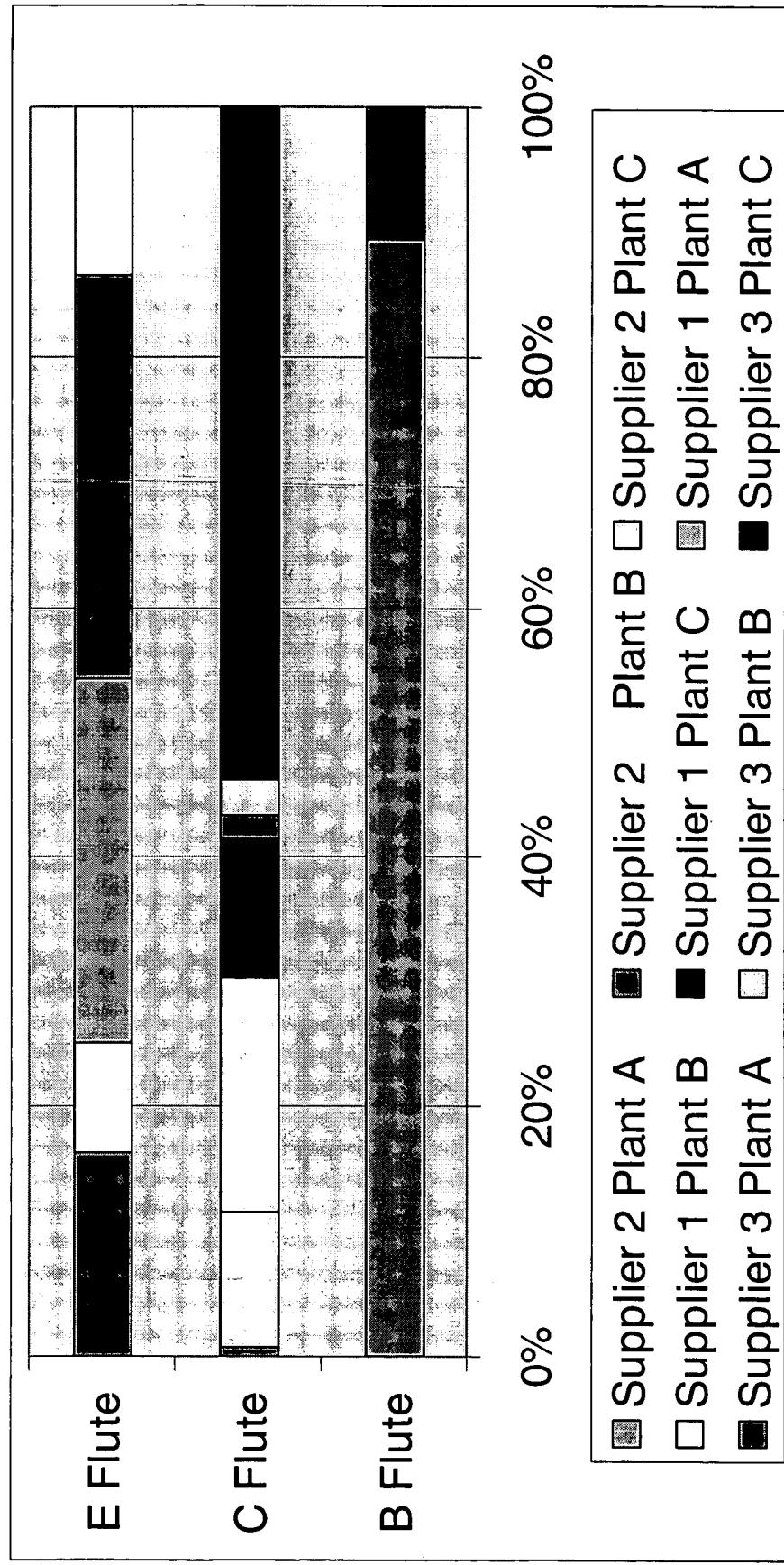


FIG. 32

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

264

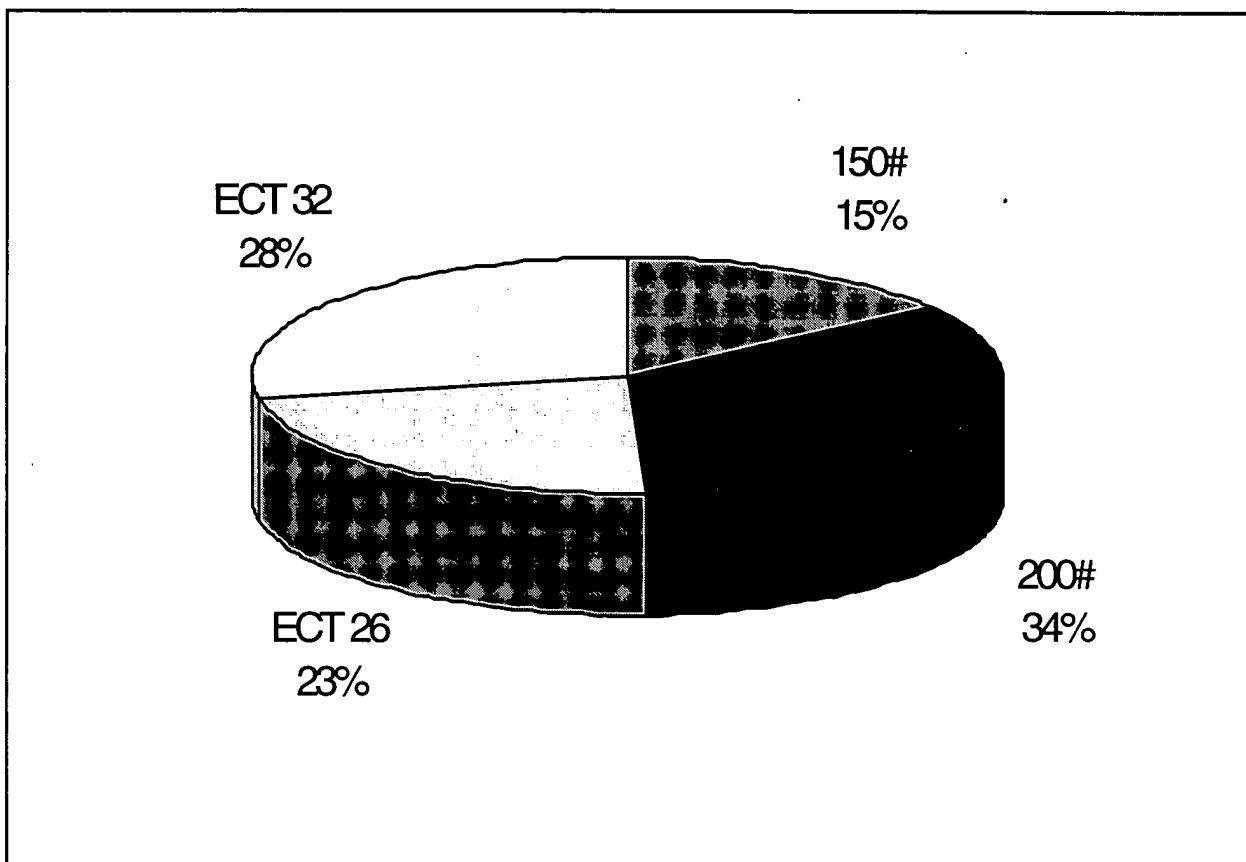


FIG. 33

First Named Inventor: Mary K. Kroening

Case No.: 59052UJS002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

266

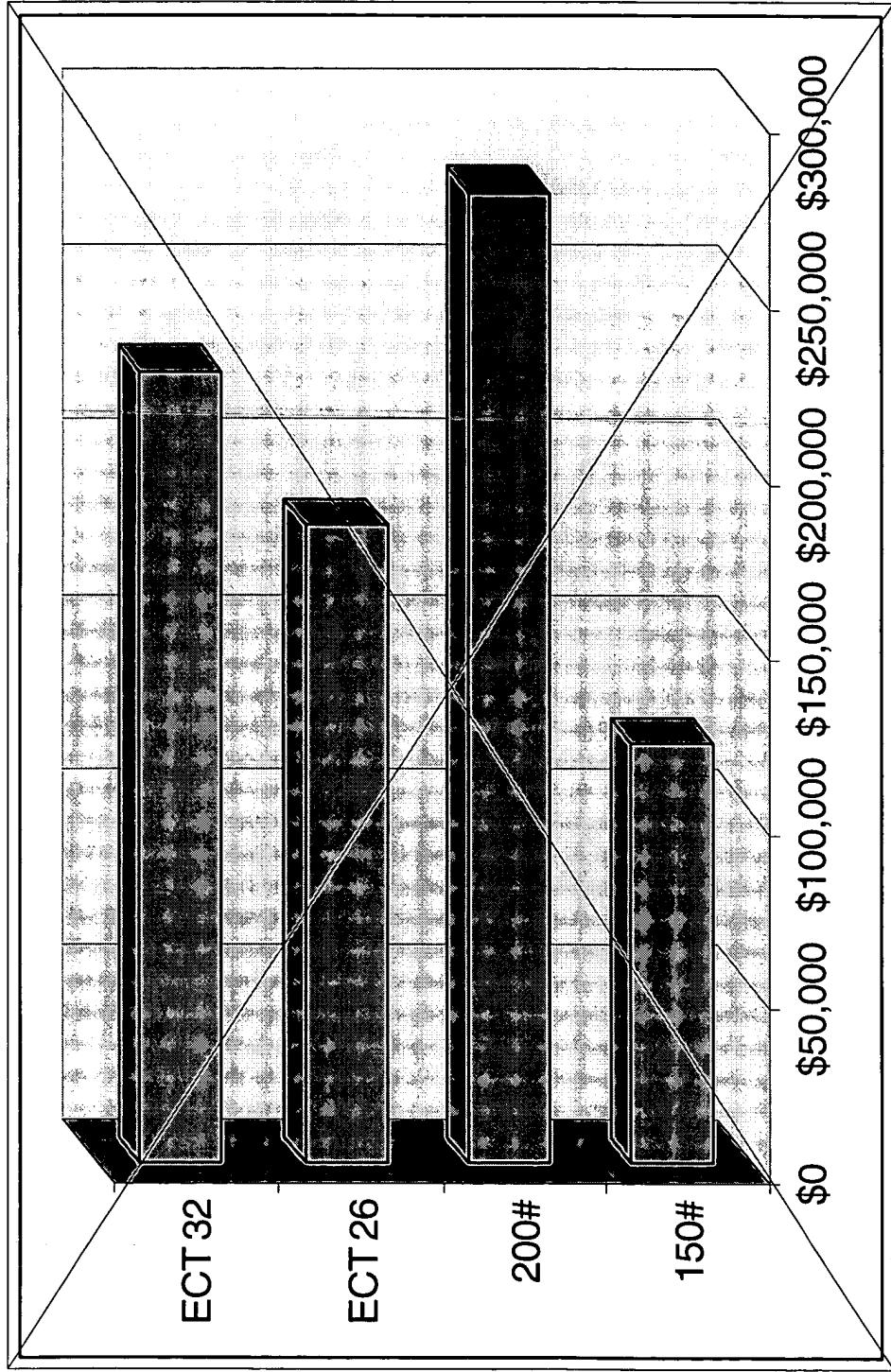


FIG. 34

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL PROCUREMENT USING CENTRALIZED PACKAGING DATA MANAGEMENT SYSTEM

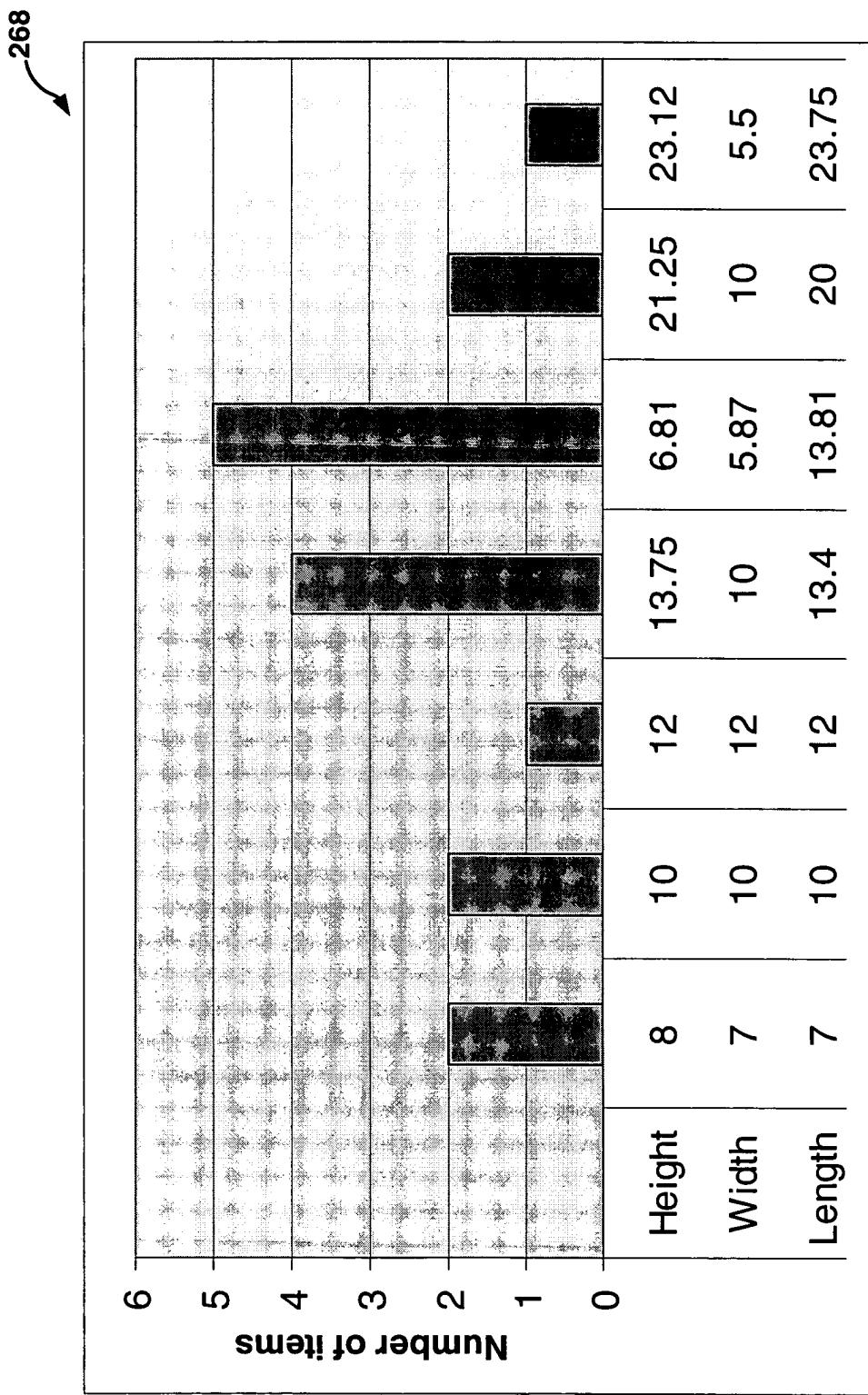


FIG. 35

First Named Inventor: Mary K. Kroening

Case No.: 90052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

270

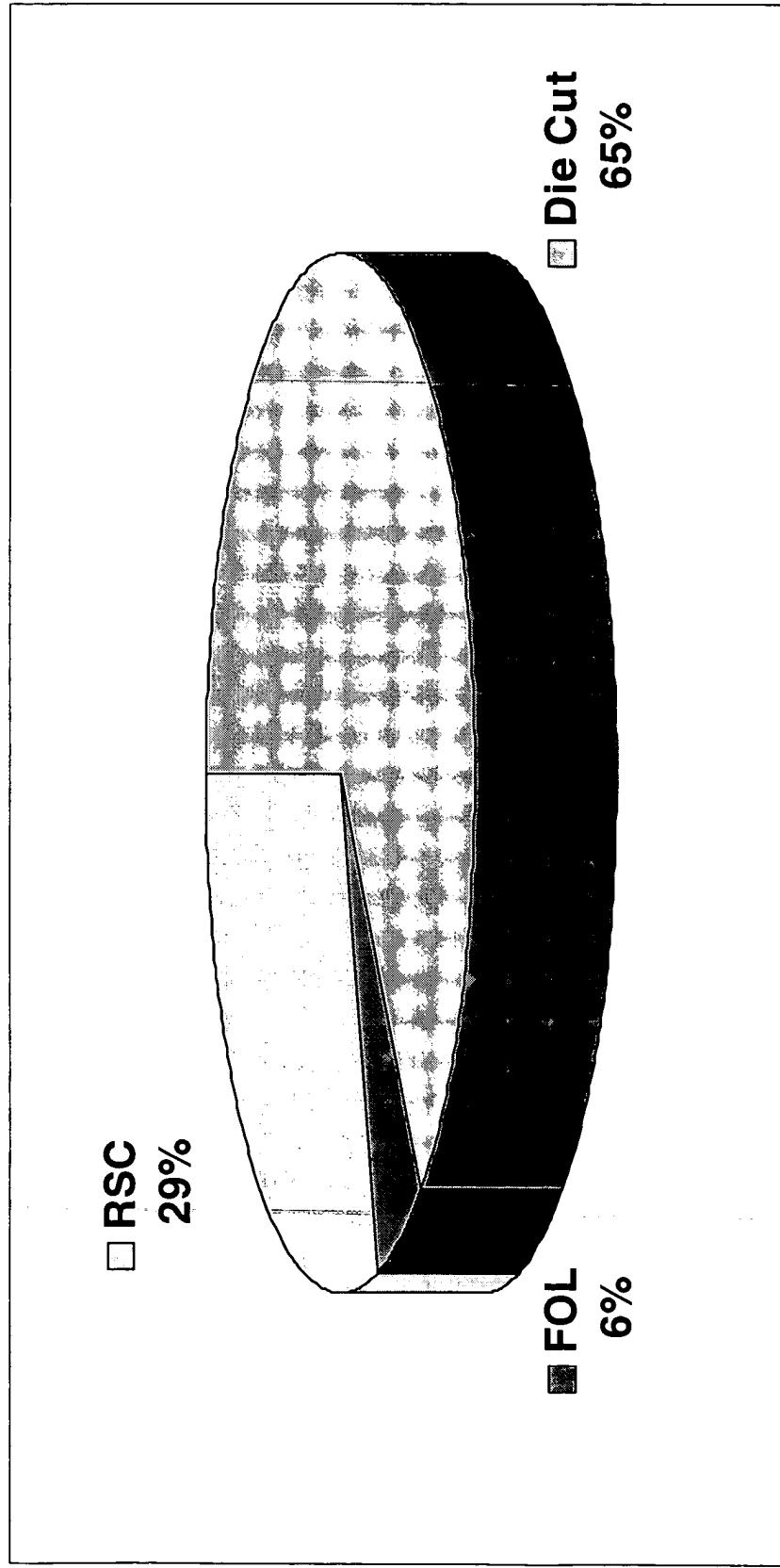


FIG. 36

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

272

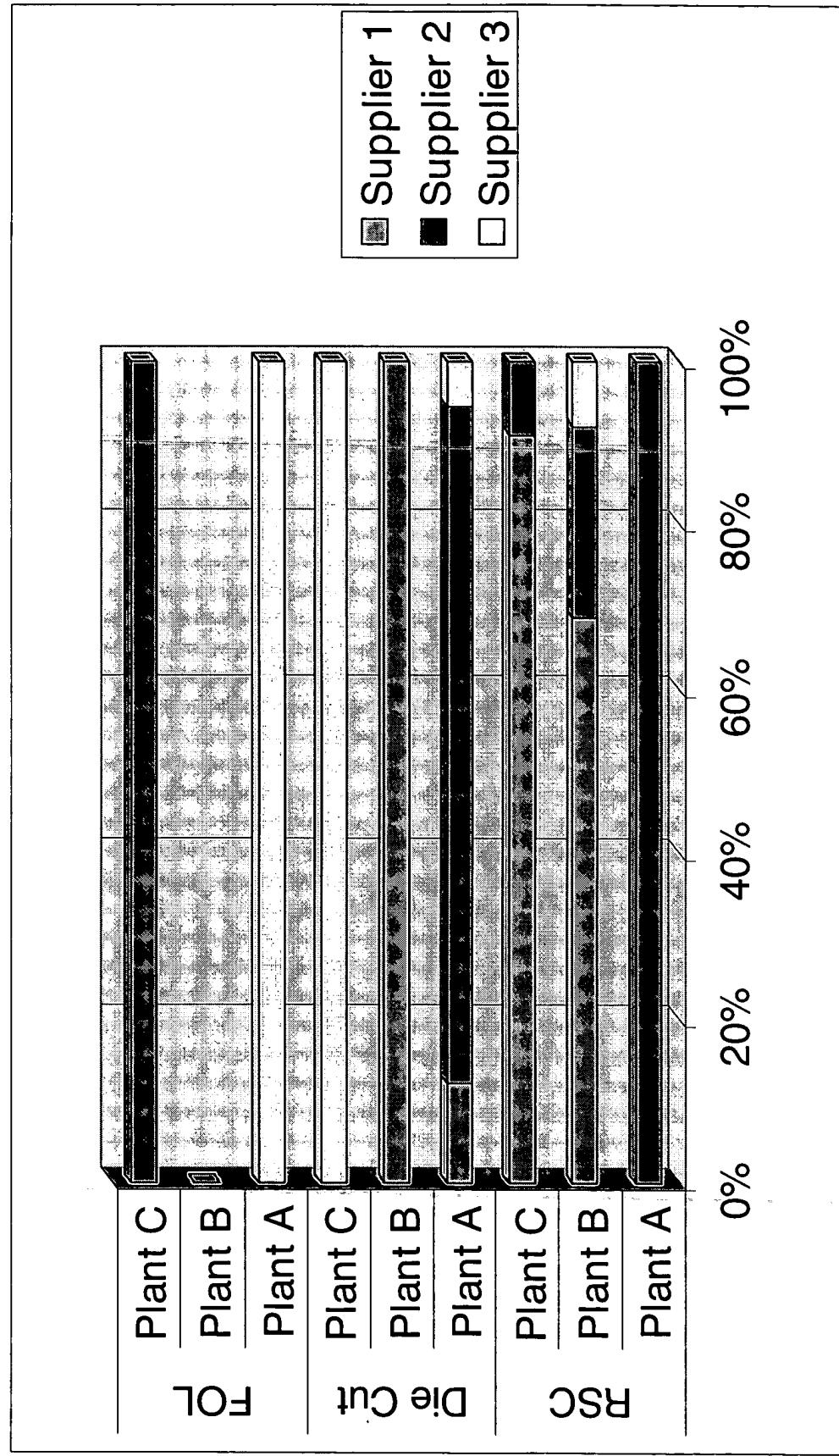


FIG. 37

First Named Inventor: Mary K. Kroening

Case No.: 59052US002

Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

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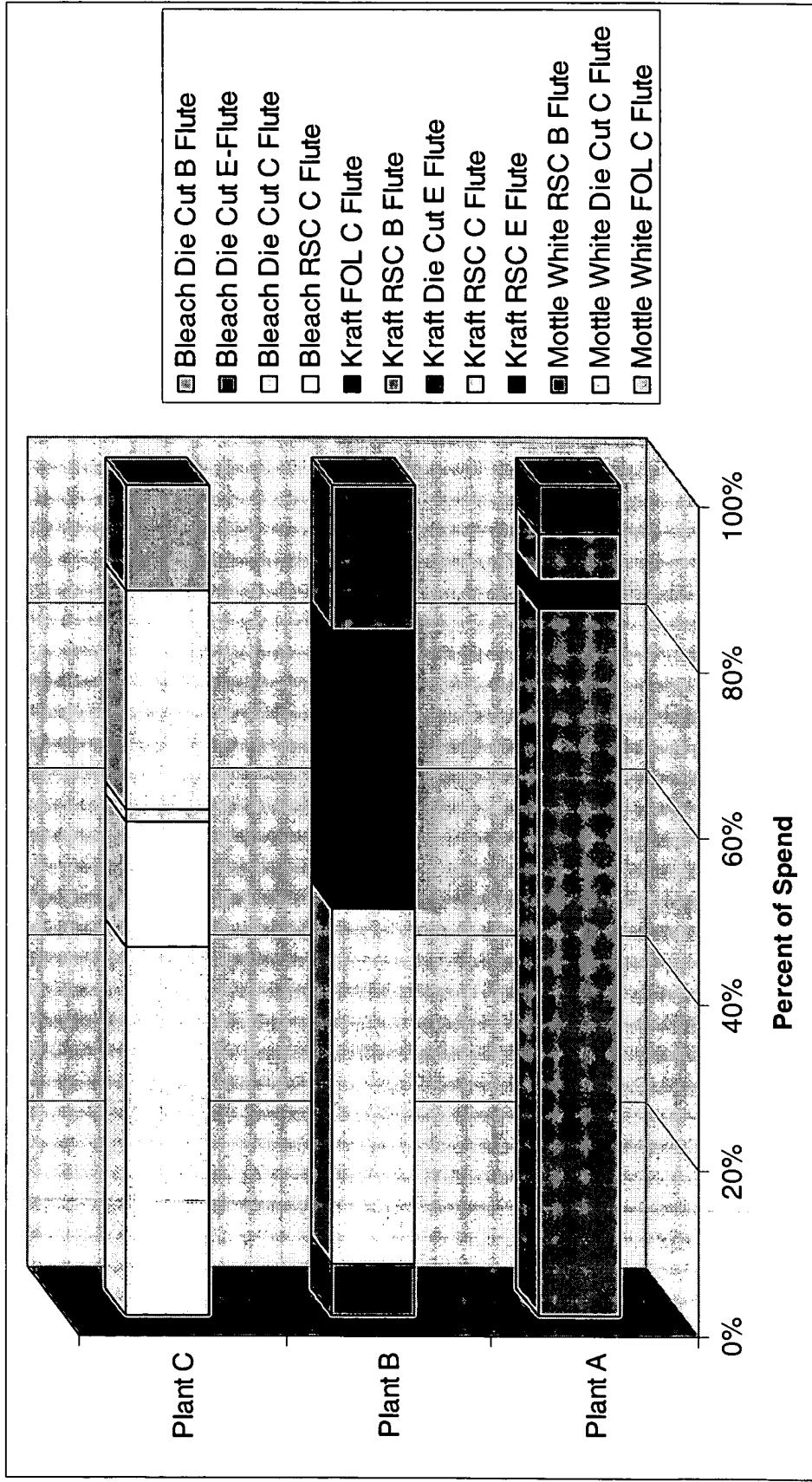


FIG. 38

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TYPES OF TRANSACTIONS PER YEAR

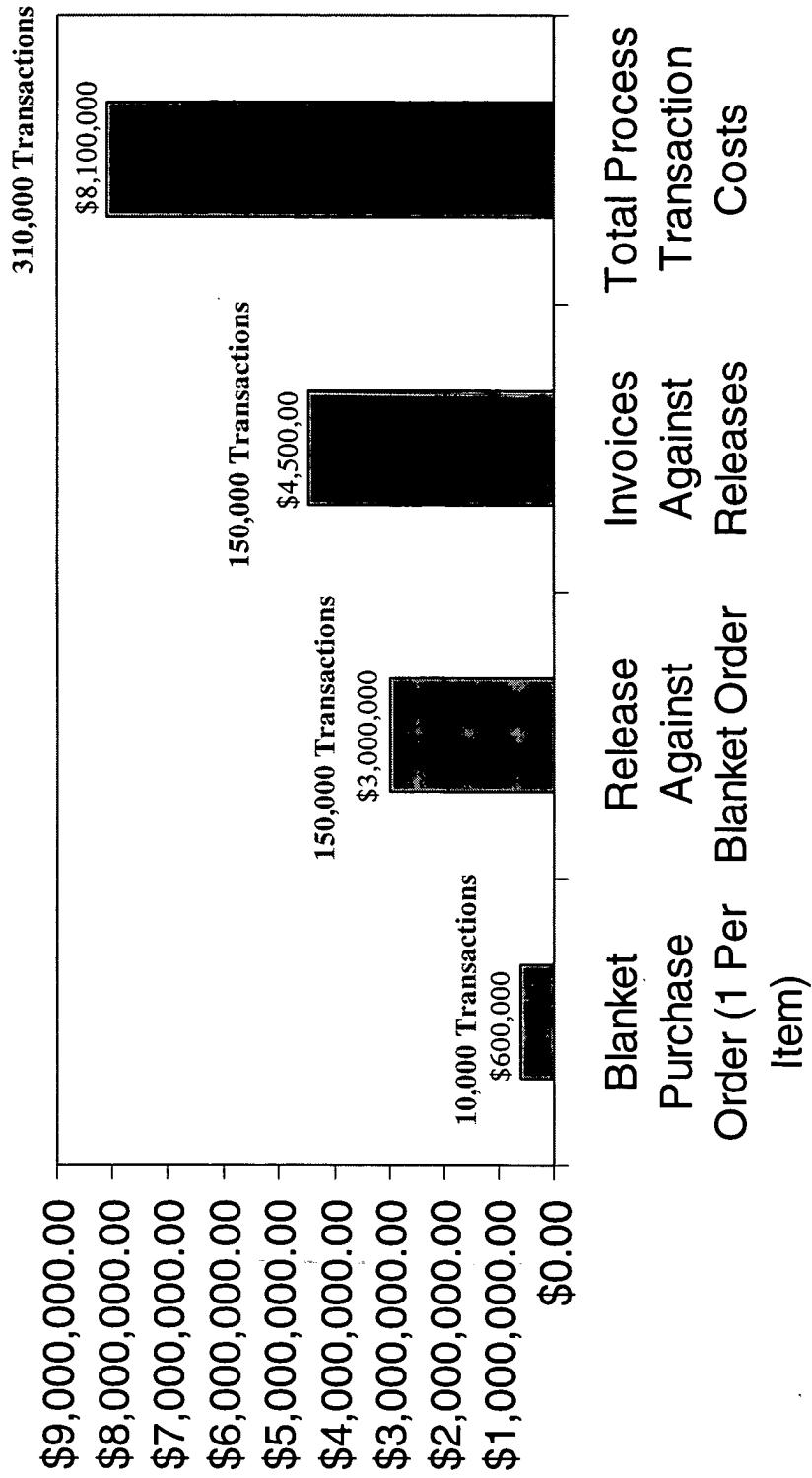


FIG. 39

280

US Shipments of Corrugated Packaging by Industry

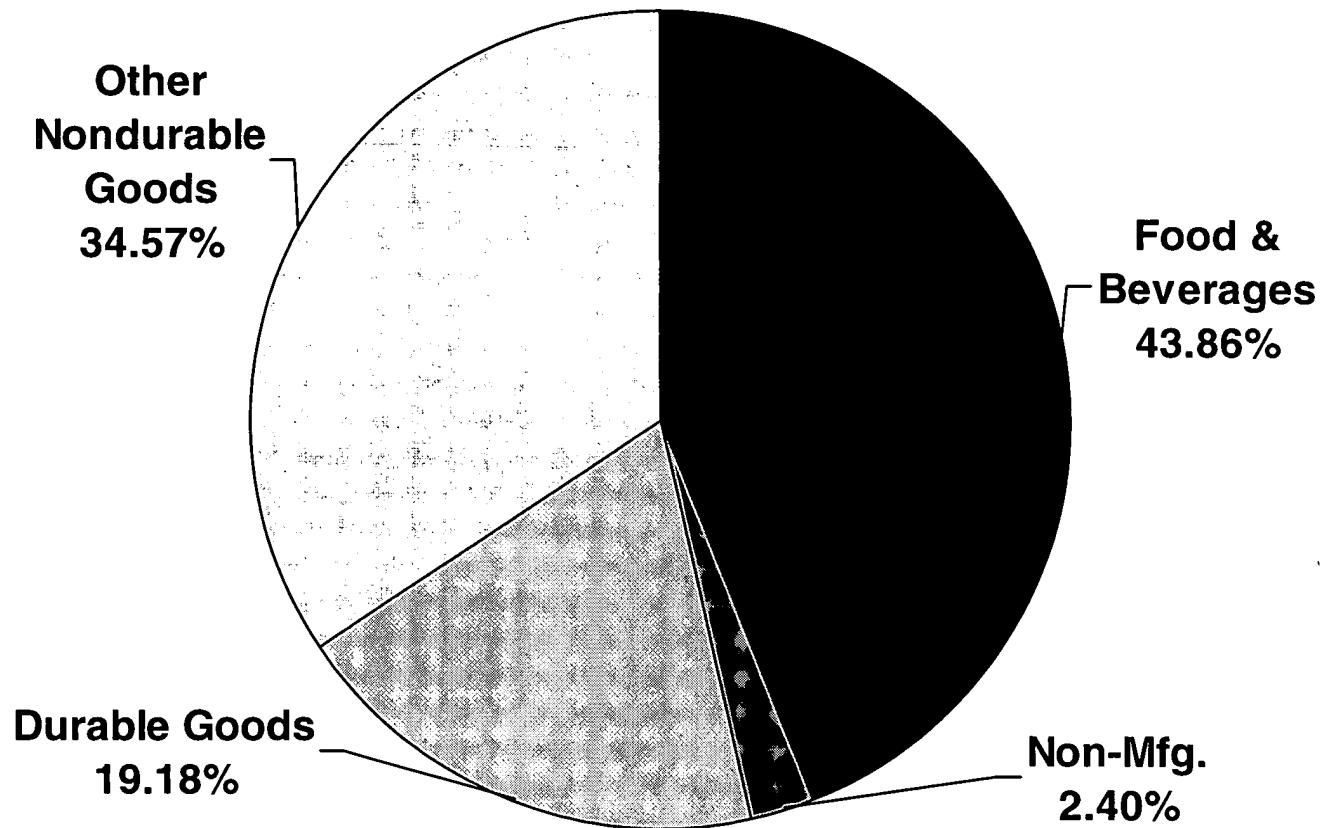


FIG. 40

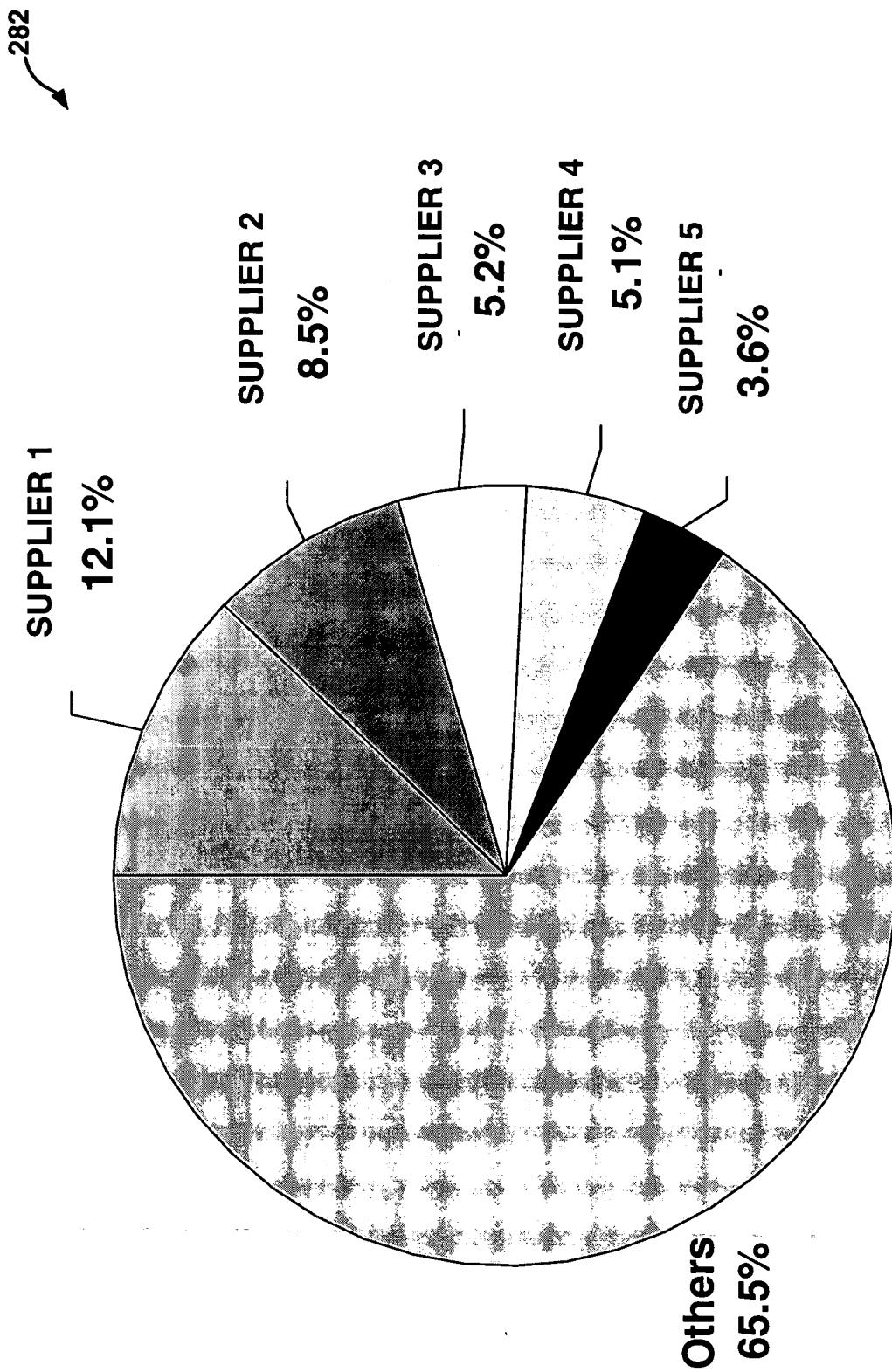


FIG. 41

First Named Inventor: Mary K. Kroening
Case No.: 59052US002
Title: STRATEGIC SOURCING FOR PACKAGING MATERIAL
PROCUREMENT USING CENTRALIZED PACKAGING DATA
MANAGEMENT SYSTEM

Corrugated Box Shipments Forecast

284

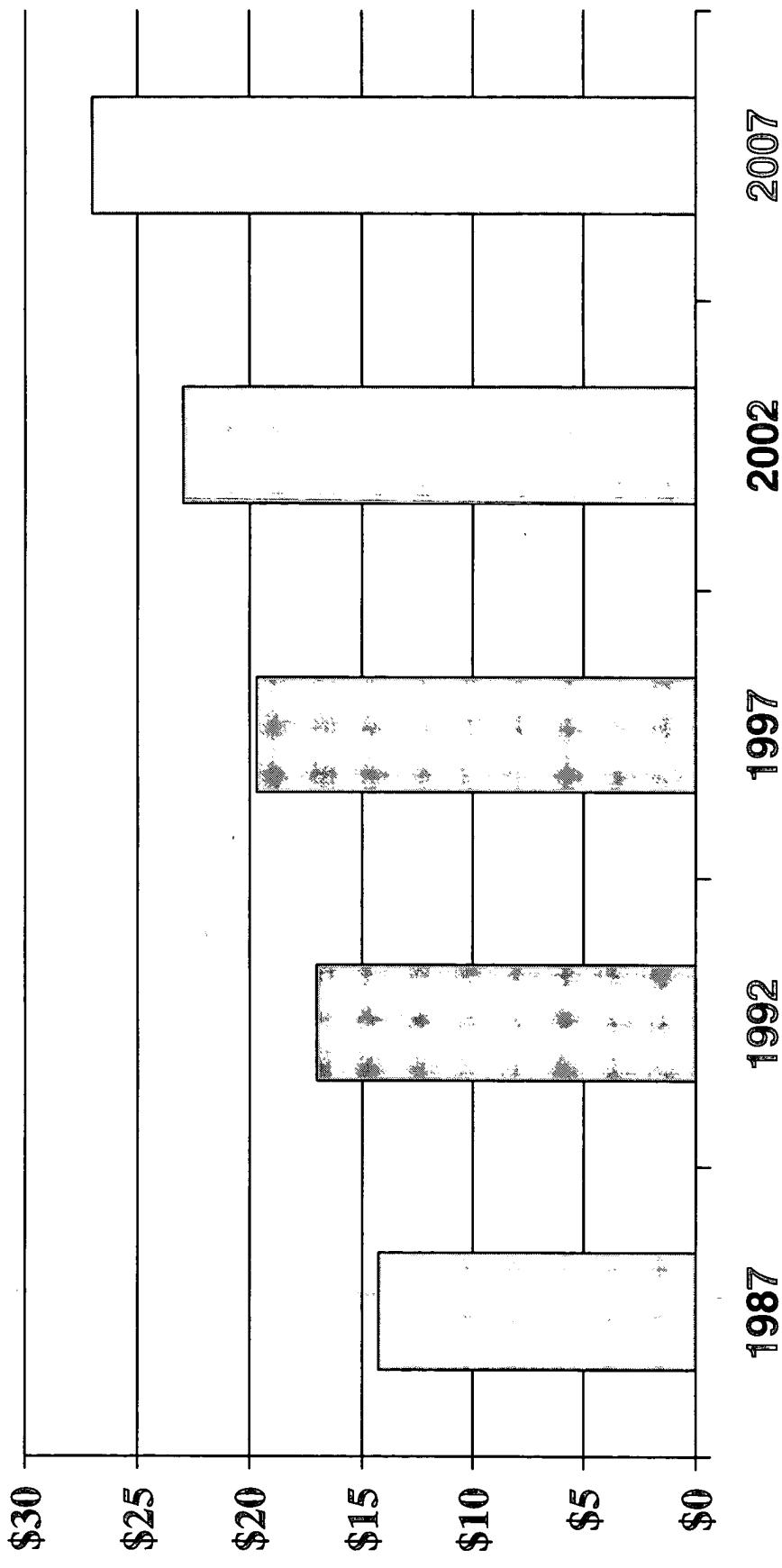


FIG. 42

RAW MATERIAL FORECAST VOLATILITY Linerboard Market

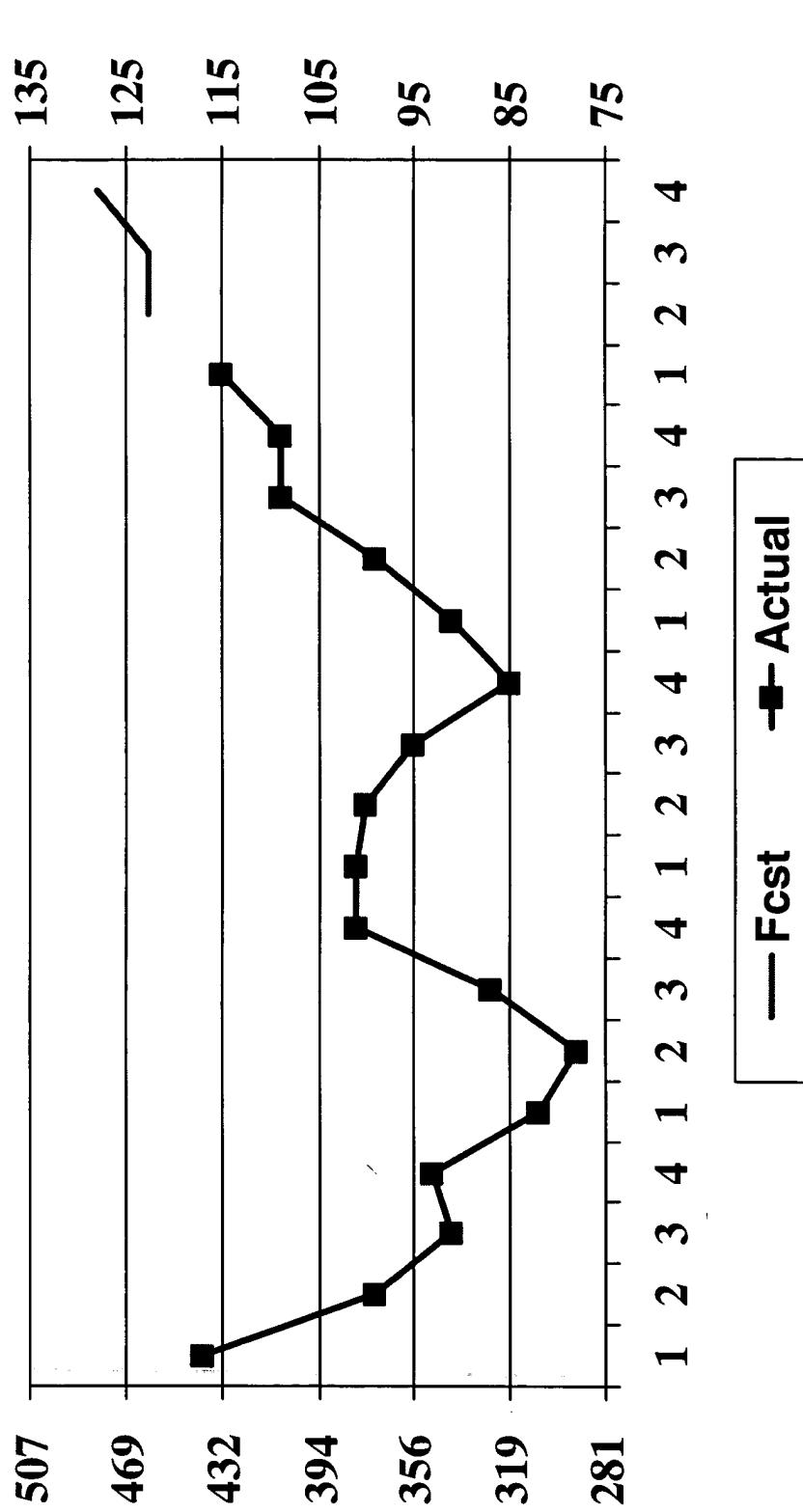


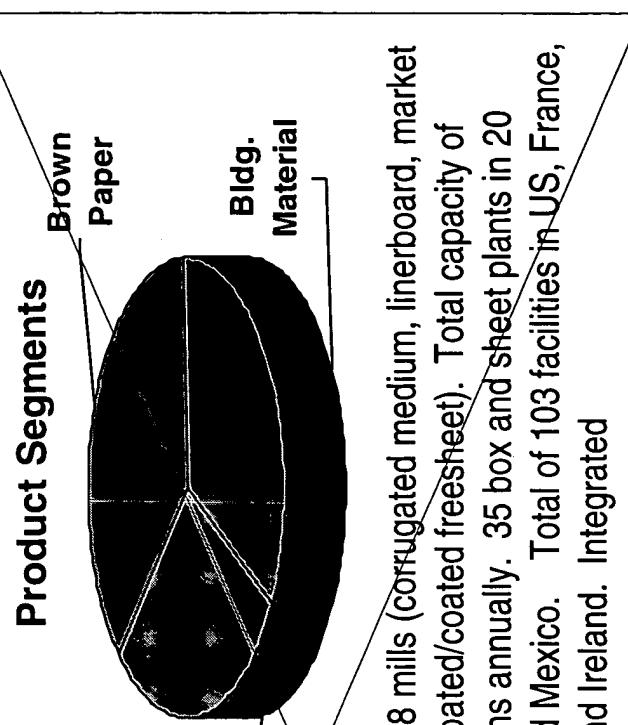
FIG. 43

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Supplier A

1998 Financial Highlights

Sales Revenue	\$2,500
Net Income	\$82
Sales Growth 1 Year	5.5%
Sales Growth 5 Year	6.5%
Operating Margin	8.3%
Net Margin	2.4%
Employees	10,000



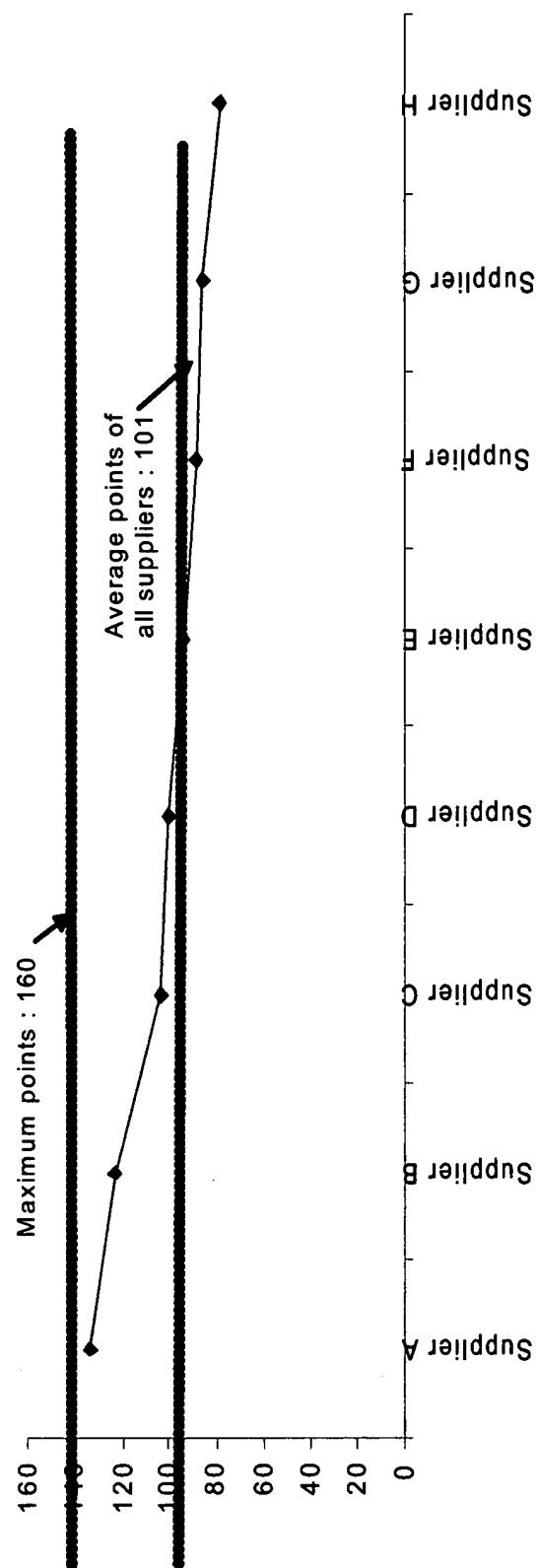
Operates 8 mills (corrugated medium, linerboard, market pulp, uncoated/coated freesheet). Total capacity of 3.3MM tons annually. 35 box and sheet plants in 20 states and Mexico. Total of 103 facilities in US, France, Mexico and Ireland. Integrated

Background - News

Known as a low-cost producer of paper. One of top 10 producers of fine paper. Kraft paper represents 5% of US production. Major converter/distributor of business forms. Top 10 US forest landowners. Purchased 11 corrugated plants in 1995

Qualitative Evaluation Summary Results**Suppliers**

Suppliers	Points
Supplier A.	134
Supplier B	123
Supplier C.	104
Supplier D	100
Supplier E	94
Supplier F	89
Supplier G	86
Supplier H	79

Average points of all Suppliers 101.125

Suppliers

1. Proximity & Ability to Serve 3M
2. Pricing & Cost Reduction
3. Supply Chain & Transactions
4. Quality & Manufacturing Capabilities
5. Design Capabilities
6. Management Support

